November 2020

Section 1. Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) Alignment

Grade	TEKS Student %	TEKS Teacher %	ELPS Student %	ELPS Teacher %
Grade 3	100%	100%	N/A	100%
Grade 4	100%	100%	N/A	100%
Grade 5	100%	100%	N/A	100%

Section 2. Concept Development and Rigor

- Materials concentrate on the development of the primary focal areas outlined in the TEKS.
- Materials provide a limited variety of the types of concrete models and manipulatives, pictorial representations, and abstract representations; they rely heavily on pictorial representations. Materials do not support teachers in developing students' progression along the CRA continuum.
- Materials support coherence and connections between and within content at the gradelevel and across grade levels; resources build vertical content knowledge by accessing prior knowledge and understanding of concept progression.
- Tasks are of high-quality and engage students in the appropriate level of rigor and complexity as identified in the TEKS.
- Students have opportunities to apply mathematical knowledge and skills to solve problems in new contexts, including those arising in everyday life and society.

Section 3. Integration of Process Skills

- Materials develop students' abilities to use and apply a problem-solving model that is transferable across problem types and grounded in the TEKS.
- Students have some opportunities to develop their self-efficacy and mathematical identity by sharing strategies and approaches to tasks and some opportunities to select appropriate tools for the work, concept development, and grade (e.g., calculator, graphing program, virtual tools).

• Materials sometimes prompt students to effectively communicate and justify mathematical ideas, reasoning, and their implications in multiple representations.

Section 4. Progress Monitoring

- Materials include developmentally appropriate diagnostic tools; however, limited guidance is provided for teachers and students to monitor progress.
- Guidance is provided for teachers to respond to individual student needs; limited guidance is provided to teachers and administrators to analyze and respond to data, and administrators are not provided with the guidance or tools needed to support teachers.
- Materials include frequent, integrated formative assessment opportunities and routine progress monitoring opportunities.

Section 5. Supports for All Learners

- Materials include guidance, scaffolds, supports, and extensions that maximize student learning potential; targeted instruction and activities are provided for students who struggle with content mastery.
- Materials provide a limited variety of instructional methods to appeal to a variety of learning interests and needs.
- Materials include supports for English Learners (ELs) with sequenced and scaffolded linguistic accommodations commensurate with various levels of English language proficiency.

Section 6. Implementation

- Materials include a cohesive, year-long plan with practice and review opportunities that support instruction.
- Materials are designed in a way that allows Local Education Agencies the ability to incorporate the curriculum into district, campus, and teacher design and considerations. Guidance for implementation is provided that ensures the sequence of content is taught in an order that is consistent with developmental progression of mathematical concepts and skills.
- The visual design of student and teacher materials is neither distracting nor chaotic.

Section 7. Additional Information

• The publisher submitted the technology, cost, and professional learning support worksheets.

2.1 Materials concentrate on the development of the primary focal area(s) for the grade-level.

- Materials spend the majority of concept development of the primary focal areas for the grade-level as outlined in the TEKS.
- Materials strategically and systematically develop students' content knowledge as appropriate for the concept and grade-level as outlined in the TEKS.
- Materials provide practice opportunities for students to master the content.

Meets 4/4

The materials spend the majority of concept development on the primary focal areas, strategically and systematically develop students' content knowledge, and provide practice opportunities for students to master the content. The materials devote 15 of the 16 topics to addressing one or more focal areas. The materials strategically and systematically develop students' content knowledge by using rigorous problem solving that enables development in students' procedural fluency and conceptual understanding throughout the consistent three-part lesson plan format. The materials provide various practice opportunities for different settings and modalities using hands-on or visual representations when they are developmentally appropriate. Tasks also combine independent and guided practice as well as games that can be played alone or with partners. The tasks are differentiated to meet the needs of diverse learners. The materials build upon previously taught concepts from other topics within the grade and from previous grades to increase rigor and ensure students master the full intent of the concept. Each lesson uses familiar tools and strategies to push students' thinking to new understanding and application.

Evidence includes but is not limited to:

The scope and sequence lists color-coded strands that correspond to the TEKS; a visual chart displays when the strand is introduced, practiced, and applied throughout grades K–5. The focal areas in grade 3 have an emphasis on "Practice" lessons for each focal area. Students are asked to revisit and share their background knowledge through a series of problems on a worksheet titled "Review What You Know" in the Student Edition (SE).

The "Topic Planner" describes the content of each lesson, listing the TEKS, ELPS, "Essential

Understandings," materials, resources, and suggestions for professional development videos to help teachers build their background knowledge of the content or their teaching skills. The professional development video library includes a video for each of the focal areas. The multiplication video explains that "different kinds of situations can be represented using multiplication but that each involves the joining of equal groups in some way." It then explains how the various models and joining strategies build into one another, including the repeated addition strategy introduced in second grade.

The materials devote a majority of lessons to the primary focal areas that align with the gradelevel TEKS. For example, in grade 3, the primary focal areas are addressed in 15 of the 16 topics. Place value is addressed in six topics; operations on whole numbers are addressed in nine topics; understanding fractional units and geometry are each addressed in two topics. In nine lessons, Topic 1 ("Numeration") covers how to represent numbers, name numbers, understand place value relationships, compare and order numbers, count money, and round on a number line.

The materials include a "Correlations Guide" that breaks the TEKS into smaller objectives and lists both the SE and Teacher Edition (TE) pages that address those TEKS and objectives. Each objective is addressed in a formal lesson, and the materials offer a "Reteaching Set" with activities using related visuals and practice opportunities to master the skill. After explicitly naming the TEKS covered in each unit, the Topic 1 planner names the two process standards that are featured in this topic ("formulate a plan" and "select and use tools"). The Topic 1 planner then outlines the content focus: "The place value chart illustrates the fundamental pattern of the way the numbers are formed." It states the Essential Understanding: "Our number system is based on groups of ten. Whenever we get 10 in one place value, we move to the next greater place value." Topic 4 ("Multiplication Meanings") provides guidance on two process standards in the "Math Background Focus" section. The "Analyze Information" section explains that students may have to answer questions in multi-step problems and use multiplication models and number lines to explain their mathematical thinking.

The materials build upon previously taught concepts from other topics within the grade and from previous grades to increase rigor and ensure students master the full intent of the concept. The "Content Guide" includes "Big Ideas in Math," a table that categorizes mathematical topics and lists the grades in which the topics are addressed. For example, "Estimation" is covered in three units in grade 3, six units in grade 4, and six units in grade 5. "Texas Focal Points" includes a one-page table that pinpoints the Texas Focal Points revised in 2013 and lists the location of these focal points in the materials. "Scope and Sequence" is a table that shows each skill on a continuum and indicates when the skill is first introduced, when the skill is practiced, and when the skill advances to application. "Skills Trace" provides a table for each skill; it shows the progression of related skills that have previously been taught and related skills that will be taught in the future. This table supports teachers in understanding what prior knowledge students should have, as well as the level of depth and rigor they need to be ready for the next grade level. For example, for the topic of fractions, students in second grade identify, describe, and compare fractional parts and name them as *halves, fourths*, and *eighths*. In third grade, students begin to use fractional notation and various models, including a

number line. They also compose and decompose fractions both with and without models. By the end of fourth grade, students add and subtract fractions and write them in their simplest form. The use of models and correct terminology is reinforced throughout all third-grade fraction lessons in order to help students make connections between previous and new learning. The questions and tasks build in academic rigor to meet the full intent of the primary focal areas.

In Topic 4, materials introduce multiplication for the first time in grade 3. The lessons begin with the meanings and models of multiplication applied in context. Then, in Topic 5, students look for patterns of multiplication and apply that knowledge to solving basic multiplication. The next two topics follow the same development cycle, but with division. This method of slowly building the understanding and models of multiplication and division prepares students for more complex work in the other five topics on these two operations, in which they use patterns of counting to develop fact fluency, breaking two-digit factors into simpler problems.

In Topic 6, Lesson 1 begins with the concept of division as sharing. Division concepts are developed throughout the topic. In Lesson 4, students create their own division problems for a given division problem. In Lesson 5, students utilize strip diagrams.

In Topic 12, the focal point is using attributes to sort, classify, and measure two- and threedimensional figures. All four lessons center around this focal point. In Lesson 12-1, students learn about and sort different quadrilaterals by cutting and sorting them. As the lesson progresses, students identify the attributes of quadrilaterals. On the quick check, students identify, analyze, reason, and construct arguments. Classifying and sorting quadrilaterals spirals back in future topics. In Topic 12-5, "Daily TEKS Review" has a question addressing the focal point "Which shape below is a quadrilateral?" Topic 12's "Mixed Problem Solving and Number Sense" pages have questions about shapes. The "Benchmark Assessment" on Topics 9–12 spirals.

The materials state that their program design "combines conceptual understanding with rigorous problem solving that enables you to develop your students' procedural fluency." This fluency is achieved by using a three-part lesson structure that consists of "Problem-Based Learning," then a "Visual Learning Bridge" that introduces or refines the use of visuals, and then "Assess and Differentiate," which allows teachers to provide specific reinforcement or extensions for all learners. Woven throughout the lessons are "nonprocedural, multi-step problems" that encourage the use of the Mathematical Process Standards and focus on students' development of their own problem-solving models. Materials state: "Research shows that introducing new ideas by having students solve problems in which those ideas are embedded develops deeper understanding than other methods." This research is why the opening activity in each lesson begins with a problem-solving discussion. The lessons in the instructional materials include suggestions and activities to support practice and reinforce the primary focal areas. The TE provides "Quick Checks," "Intervention Lessons," "Problem Solving Practice," and Benchmark Assessments.

The materials provide various practice opportunities for different settings and modalities. In grade 3, Topic 4 (Multiplication Meanings), materials provide teacher guidance on the content. They explain and illustrate the "Meaning of Multiplication and Visual Representation" as repeated addition of equal groups and as arrays. In the next section, materials explain and illustrate models for multiplication: modeling multiplication on a number line and modeling multiplication as an area model. Lessons 4.1 and 4.2 utilize area models and arrays; Lesson 4.3 utilizes number lines. In Topic 11 (Fractions), students practice using increasingly sophisticated hands-on manipulatives and follow each manipulative with drawings. In the final lesson of the topic, students apply a problem-solving model and use both symbols and a diagram to support understanding of the given problem. This lesson incorporates four of the process standards, which helps solidify the concept by connecting fractions in context with the types of problems students see in their workbooks.

2.2 Materials sequence concepts from concrete to representational to abstract (CRA) as is appropriate for the grade-level and content.

- Materials include a variety of types of concrete models and manipulatives, pictorial representations, and abstract representations, as appropriate for the content and grade level.
- Materials support teachers in understanding and appropriately developing students' progression along the CRA continuum.

Partially Meets 2/4

The materials include a limited variety of the types of concrete models and manipulatives, pictorial representations, and abstract representations that are appropriate for the content and grade level. The materials provide limited strategic and integrated instruction in all components of mathematical rigor: conceptual understanding, procedural fluency, and application. The materials rely heavily on pictorial representations and provide very little support for concrete models and manipulatives. The materials do not support teachers in developing the students' CRA progression.

Evidence includes but is not limited to:

Throughout the materials, every lesson follows the same three-step structure. The first step is called "Problem-Based Learning," which moves the lesson content from pictorial representations to abstract representations and engages students in the content with the authentic "Solve and Share" problem. The Teacher Edition (TE) includes student work samples and questions to help students think deeply about the problem and to analyze each other's work. The second step is the "Visual Learning Bridge," which supports the development of conceptual understanding using interactive features of "Problem-Based Learning" tasks and the step-by-step "Visual Learning" activity. There are print and digital resources for both the students and teacher to support this step in the lesson. The materials rarely include opportunities to use concrete manipulatives to begin concept development.

The Topic 1 program overview focuses on two process standards. When formulating a plan, it can be expected that students "draw pictures [of an array] like the one below to analyze

relationships and to help them plan how to write a good math explanation." When deciding what tools to select and use, students may use "place-value charts and place-value blocks to help them understand the place value of each digit in the numbers." The emphasis on using the tools as a means to arrive at an answer does not support student understanding through the CRA continuum.

In Topic 1, Lesson 1, the teacher guide points out that "place-value blocks can be used to model and name numbers in different ways.... Students find that, though the models may differ, the value represented by the models is the same." Teacher guidance is limited to this essential understanding and does not address where student understanding is along the CRA continuum or how to help students move through the phases.

In Topic 1, Lesson 7, students practice counting and computations with money, using concrete bills and coins. They reference visuals of each in their workbooks and in the video portions of the lesson. They then immediately use abstract notation to note totals of money, such as \$6.91 or 6 dollars and 91 cents.

The TE for Topic 3, Lesson 1, asks students to "analyze the relationship between using an expanded algorithm to add two 3-digit numbers and counting on using place value blocks to add 3-digit numbers." It also directs the teacher to "point out that counting on with place-value blocks is one way to break an addition problem into a series of easier problems based on place value. Problems that require regrouping involve manipulating the initial blocks that represent the numbers."

Topic 3 uses concrete models, pictorial representations, and abstract representations. For whole group instruction, manipulatives are mentioned only once, for the Solve and Share. Instructions state, "Give 20 two-color counters to each student pair if needed." Pictorial representations are heavily used, including arrays, strip diagrams, and number lines. Students look at arrays and match them to multiplication problems and look at multiplication problems and draw arrays to match. For intervention, two-color counters are used as manipulatives in the two lessons. Pictorial representations are also used and include arrays, strip diagrams, and number lines.

In Topic 11, Lessons 3 and 4, the learning objectives use fractions on a number line. The suggested lesson materials in both are number lines or strips of paper. In Lesson 3, the TE states, "You may wish to provide students with strips of paper at least as long as the path to help them divide the path into halves, fourths, and eighths." In Lesson 4, the TE states, "Provide each student with two identical strips of paper. In the problem, students connect ideas they know about fractions to label folded strips of paper."

In Topic 11, "Background Knowledge for Teachers" centers around the Process TEKS within fractions; it explains how students formulate plans by creating or using pictures or interpreting

a model. The section also explains how students can analyze relationships between unit fractions and fractions with a numerator greater than one by using a visual model to illustrate the abstract representation of the sum of unit fractions to create a fraction with size 1/b. The content explanation of fractions begins by explaining the conceptual conflicts between whole numbers and fractions and then goes on to explain the four fraction models that will be used in the topic.

Topic 13 ("Measurement: Perimeter and Area") spirals in Topic 14 ("Measurement: Capacity, Weight, Mass and Time") through "Today's Challenge." Students use online tools to address the daily problem using the same data set. Each day, the problems become increasingly more challenging. Students use prior knowledge as they work on these problems. On Day 1, students draw a diagram of a square. On Day 2, students use a representation to find the area. On Day 3, students communicate ideas by comparing distances when finding perimeters of two shapes. On Day 4, students extend their thinking by comparing the area of two different shapes, one being a composite figure formed by two rectangles. On Day 5, students find the area of a more complex shape.

2.3 Materials support coherence and connections between and within content at the grade-level and across grade levels.

- Materials include supports for students to build their vertical content knowledge by accessing prior knowledge and understanding of concept progression.
- Materials include tasks and problems that intentionally connect two or more concepts as appropriate for the grade-level.
- Materials provide opportunities for students to explore relationships and patterns within and across concepts.
- Materials support teachers in understanding the horizontal and vertical alignment guiding the development of concepts.

Meets 4/4

The materials support coherence and connections between and within content at the grade level and across grade levels. There are supports for students to build their vertical content knowledge by accessing prior knowledge and understanding of concept progression. The materials connect new learning to previously learned concepts, knowledge, and skills with a math background overview and online professional development video for teachers that explains how TEKS are developed.

Evidence includes but is not limited to:

The Teacher Edition (TE) "Program Overview" contains a "Skills Trace" that shows the vertical alignment of TEKS both within and across grade levels. Materials build students' vertical content knowledge by referencing or showing how concepts progress in rigor. The three-step lesson format is highly dependent on the teacher modeling or using questions effectively to promote student discourse and connect previous learning to the current objective. Materials reference familiar models and strategies to facilitate rigor and concept development. The materials include tasks and problems that intentionally connect concepts in the "Solve and Share" problems and the "Visual Learning Bridge." The student workbook and center activities use story problems to help students discuss and apply math to real-world problems. The materials provide opportunities for students to explore relationships and patterns within and across concepts, especially with supporting questions from the teacher and in their workbook.

Materials support teachers in a surface-level understanding of the horizontal and vertical alignment guiding the development of concepts; resources merely list TEKS and their alignment with other grades or when they occur in the school year. Materials provide little support for concept development across topics within or across school years.

Prior to the administration of the topic test, students tackle the essential questions of the topic verbally or in writing. This questioning permits students to tie their learning from the topic to essential understandings across the concept. The benchmark test, a culminating assessment of four topics, assesses what students have learned and allows them to see the connections across concepts. "Big Ideas in Math" is a table that categorizes mathematical topics and lists grades when the topic is addressed. For example, it shows that "Estimation" is covered in three units in grade 3, six units in grade 4, and six units in grade 5. The "Big Idea" for estimation is "Numbers can be approximated by numbers that are close. Numerical calculations can be approximated by replacing numbers with other numbers that are close and easy to compute mentally. Some measurements can be approximated using known referents as the unit in the measurement process."

In Topic 2, Lesson 2-1, students solve one-step and multi-step addition problems within 1,000, using strategies based on the properties of addition. Students are reintroduced to the commutative property, identify (zero), and associative property to "analyze the relationship between numbers." This review allows students to make connections throughout the lesson and connect their learning to prior knowledge. In Lesson 2-6, students "solve one-step and multi-step problems using strategies based on the relationship between addition and subtraction." Addition is used to check subtraction. This lesson allows students to tackle a new skill (subtracting within 1,000) while using a previously taught skill (using addition to check for subtraction) to help them check the accuracy of their answers. Materials state: "Remind students that if the numbers in the two calculations do not match, there may be an error in the calculation or the check." This strategy of using the opposite operation is also used in the current and future grade levels with multiplication and division, especially operations increase in difficulty with more digits and decimals.

In Topic 7 ("Division Facts"), the "Essential Question" is "How can unknown division facts be found using known multiplication facts?" The teacher refers to the Essential Question throughout the topic. The "Review What You Know Page," located at the beginning of Topic 7, provides students with a multiplication chart to utilize while solving simple division problems. This familiar aid helps students connect prior knowledge and skills to the new concept. Vocabulary word cards for the unit include *fact family* and give an example of a fact family. The Solve and Share problem in Lesson 7-1 instructs students to make multiplication arrays and then connect those arrays with division facts. In a "Math and Science Project," students research two landforms and what caused them, compare and contrast them, and describe what makes them special. Students find five to ten examples of each type of landform and the area of the landform. Finding the area of the landform is not expected to be a mathematical process but simply an internet research project. Students create and solve division problems based on their data. Math and Science Projects, STEM activities, and "Reading Mats" all provide students with opportunities to apply math in contexts outside of mathematics within the materials.

In Topic 11 ("Fractions"), background knowledge for teachers around Process TEKS within fractions explain how students formulate a plan by creating or using a picture or interpreting a model. The section also explains how students can analyze relationships between unit fractions and fractions with a numerator greater than one by using a visual model to illustrate the abstract representation of the sum of unit fractions to create a fraction with size 1/b. The content explanation of fractions begins by explaining the conceptual conflicts between whole numbers and fractions and then goes on to explain the four fraction models that will be used in the topic. In Lesson 1, in order to elicit students' previous knowledge on fractions, the Solve and Share problem requires students to draw a picture of a fractional part of a region. This drawing helps them describe fractional parts using the correct terminology for the next step of the lesson. In Lesson 7, in order to connect students' previous knowledge of division and fractions, students divide blank paper strips into thirds to determine how four friends could share three sandwiches. This problem-solving strategy is used throughout the rest of the lesson.

In Topic 13 ("Measurement: Perimeter and Area"), Lesson 2 promotes student discourse and connects student learning through the Solve and Share. The materials ask, "What is the perimeter of the shape below? Explain how you found the perimeter of the shape. You can connect ideas. How could what you know about the attributes of common shapes help you find the perimeter?" This lesson is an example of students using what they know about rectangles to help them find the perimeter.

2.4 Materials are built around quality tasks that address content at the appropriate level of rigor and complexity.

- Tasks are designed to engage students in the appropriate level of rigor (conceptual understanding, procedural fluency, or application) as identified in the TEKS and as appropriate for the development of the content and skill.
- Materials clearly outline for the teacher the mathematical concepts and goals behind each task.
- Materials integrate contextualized problems throughout, providing students the opportunity to apply math knowledge and skills to new and varied situations.
- Materials provide teacher guidance on anticipating student responses and strategies.
- Materials provide teacher guidance on preparing for and facilitating strong student discourse grounded in the quality tasks and concepts.

Meets 4/4

The materials are built around quality tasks that address the content at the appropriate level of rigor and complexity. The materials guide students through CRA tools, models, and understandings; the rigor of the tasks increases throughout a given unit and across units over the year. However, the use of concrete manipulatives is optional in most lesson plans, and their use in a particular lesson is not always modeled by the teacher. The materials include tasks that are meaningful to students, set in real-world contexts, and allow them to demonstrate mastery of math concepts. The materials provide guidance for the teachers on how to appropriately revise content to be relevant to their specific students, their backgrounds, and their interests. The materials provide teachers with possible student responses and or strategies to practice questions and tasks, but they do not describe which ones are the most appropriate for the task based on grade-level expectations. The materials provide teachers with common misconceptions of student responses and strategies. The materials provide teacher guidance on preparing for and facilitating strong student discourse grounded in the quality tasks and concepts.

Evidence includes but is not limited to:

Every lesson follows the same three-step structure. The first step is called "Problem-Based Learning," which engages students in the content with the authentic "Solve and Share" problem. The TE includes student work samples and questions to help students think deeply about the problem and to analyze each other's work. The second step is the "Visual Learning Bridge" (VLB), which supports the development of conceptual understanding using interactive features of Problem-Based Learning tasks and the step-by-step "Visual Learning" activity. Error analysis is included in many lessons. There are print and digital resources for both the students and teachers to support this step in the lesson. The materials develop problem-based learning and provide the appropriate level of rigor (conceptual understanding, procedural fluency, or application) as identified in the TEKS. The materials develop the content and skill by increasing in complexity throughout the grade and through grades 3–5. They do so through a given unit and across units over the year. The "Topic Planner" for each unit explains how each individual lesson connects to the TEKS and develops the "Essential Understanding." Materials clearly outline for the teacher the mathematical concepts and goals behind each task. At the beginning of each topic, in the TE, "Math Background" and "Essential Knowledge" outline math concepts and goals. The TEKS are reprinted for each lesson. Each topic also has a professional development video, which is a repetition of the material in the Math Background section of the TE.

Students who achieve a passing score on the "Quick Check" can do the on-level and advanced "Activity Centers," which include games, "Problem-Solving Learning Mat" activities, "Technology Centers," and "Math and Science" Activities. While there are many activities within the centers for each topic, it is unclear whether students have a choice in the activity each day or whether they are limited depending on the specific lesson. The TE only showcases two to three options for each lesson and does not contain any guidance for the teacher in extending students' understanding of the Intervention Activities.

The program materials do not include a philosophy or explanation of the research that explains how the topics or lessons are sequenced. The materials follow a sequence in which topics begin with simpler tasks and objectives, which are required to master objectives at the end of a topic or in future topics. So long as teachers follow the sequence and students master each lesson, they should be able to move on to more sophisticated strategies. This progression depends on whether the teacher can diagnose and intervene with struggling students daily at the end of each lesson.

Topic 1 ("Numeration") focuses on place value. Over nine lessons, the materials tackle the Essential Question "How are numbers read, written, compared, ordered, and rounded using place value?" The Math Background details the TEKS covered in this topic, the lesson numbers that align with the topic, and the Essential Understanding that's learned. The first three lessons tackle how "our number system is based on groups of ten." Materials state: "Whenever we get 10 in one place value, we move to the next greater place value...place value can be used to

name numbers in different ways." Even Lesson 8 on rounding builds on the Essential Question and Understanding: "Rounding is a process for finding the multiples of 10, 100, and so on, closest to a given number."

In Topic 1, Lesson 8, on rounding, the VLB begins with a concrete representation of an estimation problem. Three different types of rocks are in three different bowls. The name of the students and the number of exact rocks they have are in each bowl. The lesson moves to the representational, using the number line; the materials ask how many rocks Tito has. In the VLB, students reason, using the number line, how far away and how close the amount (394) is to 390 and 400. Materials then transition to rounding by hundreds using the same number (300 and 400). The abstract representation for this problem is not similar but does push the application of the concept and skill. Materials ask, "If a student is thinking of a number that has a four in the hundreds place and a two in the ones place, what number rounds to 500 when rounded to the nearest hundred?" Students reason through Mike's response of five possible answers; this opens the floor for both individual student application and reasoning as well as whole-group guided discourse. This is grade-level and content appropriate and develops the reasoning required for fourth and fifth grade, where the numbers increase in complexity.

In Topic 4, Lesson 4-5, students perform tasks that are set in real-world contexts. They create their own multiplication stories to go with given multiplication problems. Students write a multiplication story for 3 x 6. The first teacher prompt is, "How do you know what numbers to use in your multiplication story? (The factors are 3 and 6)." The teacher shows examples and prompts, "How can you tell that Randy's story is about equal groups? (The picture shows equal groups. The story is about 3 groups of six.) How can you tell that this story involves an array? (The picture shows an array. The story is about 3 rows with 6 in each row.) What is the multiplication in this story used for? (The picture shows a strip diagram. It is used to compare the number of carrots Jack has to the number of carrots Kanisha has.)" Then, students solve word problems about butterflies, teams, balloons, and pencils.

In Topic 11, Lesson 1, students show and name the fractional part of a region. For Solve and Share, students draw a rectangular-shaped garden divided into four "same size parts." This lesson helps activate students' prior knowledge of fractions and helps the teacher assess whether students understand how to divide shapes equally. Then, materials show a visual of a pan of enchilada casserole divided into six equivalent pieces. The teacher can choose to use the online version of the VLB. This version animates the problem by highlighting relevant elements in the visual and highlighting math vocabulary in a different color; it also automatically pauses to allow the teacher to facilitate discussion. A follow-up story problem called "Convince Me!" requires the student to draw lines and use shading to model the required fraction. The "Prevent Misconceptions" sidebar is embedded in the guiding questions of about 70 of the 121 lessons. The "Error Intervention" sidebar is provided during the guided practice section; it describes common errors and suggestions for addressing them. Neither sidebar is included in Lesson 6 of this topic. There is only a reference to additional practice pages in the student book, called

"Reteaching Sets," which offer visual representations of fractions bars that students must use to write the sum of unit fractions and the equations.

In Topic 13 ("Measurement: Perimeter and Area"), the lessons progress from covering regions using centimeter grid paper, to covering areas and units using one-inch grid paper, to working with standard units using rulers, to understanding formulas and making the connection between area and the distributive property, to finally finding the area of irregular shapes.

Topic 13 spirals in Topic 14 ("Measurement: Capacity, Weight, Mass, and Time") through "Today's Challenge." Students use online tools to address a daily problem using the same data. Each day, the problems become increasingly more challenging. Students use prior knowledge as they work on these problems. On Day 1, students draw a diagram of a square. On Day 2, students use a representation to find the area. On Day 3, students communicate ideas by comparing distances when finding perimeters of two shapes. On Day 4, students extend their thinking by comparing the area of two different shapes, one being a composite figure formed by two rectangles. On Day 5, students find the area of a more complex shape.

2.5 Materials include cohesive, year-long plan for students to develop fluency in an integrated way.

- Materials include teacher guidance and support for conducting fluency practice as appropriate for the concept development and grade.
- Materials include a year-long plan for building fluency as appropriate for the concept development and grade.
- Materials integrate fluency at appropriate times and with purpose as students progress in conceptual understanding.
- Materials include scaffolds and supports for teachers to differentiate fluency development for all learners.

Partially Meets 2/4

The materials provide limited support for students to develop fluency in an integrated way, and there is no evidence of a cohesive, year-long plan. The materials do not provide a year-long plan for building fluency connected to the concept development and expectations of the grade level. The scope and sequence included in the materials merely lists the TEKS and the lessons in which each TEKS is addressed.

Evidence includes but is not limited to:

The "Program Overview" explains that the main goals of the materials are "understanding, fluency, and flexibility." The program "combines conceptual understanding with rigorous problem solving that enables you to develop your students' procedural fluency." The "Content Guide" for the materials also affirms that "developing fluency with efficient use of the four arithmetic operations on whole numbers" is a priority for grades 3 through 5. At first read, this would imply that a year-long plan for building fluency can be found within the materials; however, such a plan was not found. The "Topic Planner" does not mention procedural fluency or support for teachers. As a curriculum designed with problem-solving at its core, it is arguable that the materials give precedence to teaching the properties of the four arithmetic operations over traditional fluency drill practice. The materials note that with the foundational conceptual understanding, students could add, subtract, multiply, and divide fluently. However, this may translate to difficult implementation for districts with cohorts of students that have not used

the materials beginning with kindergarten. It may also prove arduous for students and teachers who typically cover topics like addition at the beginning of the year with little spiraled practice throughout the year. The only repetitive practice is an infrequent application through problem-solving. The materials do not provide the teacher with resources for students who do not have computational accuracy or fluency.

The diagnostic and intervention materials found in the "Math Diagnosis and Intervention System 2.0" (MDIS) also do not allow the teacher to calculate beginning-of-the-year data on this measure or measure growth throughout the year. Focused on skills, it only recommends limited practice opportunities for specific student errors like "counting by 10s to 100" or "adding three-digit numbers." There are also available lessons on "mental math strategies." However, there are limited resources focused on computational fluency.

The materials do not include teacher guidance and support for conducting fluency lessons or on its structure within the program. This omission is because there is no explicit fluency practice within the program. There are no clear directions for how and when to conduct fluency activities or practice with students. There are, however, connections between concept development and fluency. The essential understanding is that we use primarily mental math to add whole numbers. Addition is explored heavily in Topics 2 and 3. Each lesson then develops students' conceptual understanding of the operation through group and individual problem solving and discourse rather than through traditional fluency practice. The materials follow a prescribed sequence and include some opportunities for shared discourse around fluency with the operations; however, the support for discourse does not include student discussion of shared ideas.

The materials include some teacher guidance and support for conducting fluency as appropriate for the concept development and grade. The materials have a "Basic Facts Timed Tests" resource, found under the "Resources" tab. This resource is in the "Teacher's Resource Masters" book and is also available as PDFs online ("Booklet B: Basic Facts, Grades K–3" from the MDIS). It contains intervention lessons that connect concept development and fluency; however, the materials do not include guidance for teachers on the structure and design of the fluency practice, including clear directions for how and when to conduct fluency activities, and they do not provide strategic discourse opportunities around the conceptual understanding behind the fluency practice. The first six tests assess either just addition, just subtraction, or a mix of the two. Each of the tests has a footnote that says they can be used anytime after Topic 3, in which students should have mastered the standard algorithms for up to three-digit numbers. The next three basic fact tests are about multiplication and have a footnote that says they can be used anytime after Topic 5, in which students would have mastered basic multiplication. The last three basic fact timed tests focus on division facts and have a footnote that says they can be used after Topic 7, in which students should have an understanding of the meanings of division and have mastered some basic division facts strategies.

Topic 2 begins by discussing addition properties (Lesson 2-1) and shifts towards how to use mental math to add (Lesson 2-2). It also introduces estimating sums as another useful strategy that students can use to gauge the reasonableness of an exact answer (Lesson 2-4). Even when the topic moves to solving for precise sums, it is grounded in other strategies, like relating addition to subtraction (Lesson 2-6) or using a number line (Lesson 2-7).

Topic 3 introduces place value and strip diagram models as well as the standard algorithm as strategies for addition and subtraction computations within 1000. In Lesson 3–5, the "Solve and Share" problem asks students to find the difference of 534 - 108. To promote discourse, the teacher asks, "How can place value help you solve this problem?" The sample answer states that students can break apart 108 into 1 hundred and 8 ones and then each part can be subtracted separately. One of the sample answers is, "I know that 108 equals 1 hundred and 8 ones. I will subtract the hundreds first. 534-100 = 434. 8 is the same as 4 and 4 more. I can take away 4 twice. 434-4 = 4. 430-4 = 426." In Lesson 3–6, as students begin using models for subtracting three-digit numbers, the Teacher Edition states: "Connecting models and drawings to written problems will help students understand the subtraction algorithm they will learn in the next lesson."

Topic 7 ("Division Facts") focuses on the inverse operation, including fact families, as the strategy to know division facts. In the Topic Planner professional development video for teachers, the presenter focuses on "think multiplication" to solve a division fact. There is no discussion or reference to fluency routines used across the year, and there is no evidence of a system for tracking the fluency progress of students across the year. TEKS 3.4F states that students recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. There is no evidence that the materials provide a year-long plan for building fluency. Using the inverse relationship between multiplication and division to find division facts as used in Topic 7 does provide students minimal opportunities to efficiently and accurately solve third-grade tasks by applying their conceptual understanding of number relationships. In Lesson 7-1, "Students use 24 counters to make an array with 3 equal rows. They write a multiplication and a division sentence to describe the array. Using the array model helps students understand and connect the two operations of multiplication and division." As Topic 7 progresses, there is little evidence that the materials show the connection between multiplication and division facts using concrete objects and the pictorial models of equal groups, arrays, and area models to explore the relationships between the two. This model is taught in Lesson 7-1 but not again.

2.6 Materials support students in the development and use of mathematical language.

- Materials include embedded opportunities to develop and strengthen mathematical vocabulary.
- Materials include guidance for teachers on how to scaffold and support students' development and use of academic mathematical vocabulary in context.

Partially Meets 2/4

The materials provide limited support in the development and use of mathematical language. The materials do not demonstrate a strategic approach to developing the mathematical vocabulary of students. Learning goals are not present within the materials to address the development of mathematical vocabulary. The materials provide some opportunities for students to listen to and read math vocabulary, but there is no evidence of students being required to speak or write using the mathematical vocabulary within and across lessons. The topic opener introduces the new vocabulary words, but they are not listed in the subsequent lessons of the topic. The materials attempt to embed the use of vocabulary within the context of mathematical tasks through the teacher's questions, but student responses do not require them to communicate mathematical ideas with content-specific vocabulary.

Evidence includes but is not limited to:

All of the topics follow the same structure involving vocabulary. The "Review What You Know" workbook page at the beginning of each topic includes a vocabulary section in which students match a word to its definition. These are usually words from the previous topic. After the "Topic Planner," the section titled "The Language of Math" highlights the ELPS and math vocabulary. Students build math vocabulary using the vocabulary cards, the glossary in the Student Edition, and the online animated glossary. "My Word Cards" can be cut out, and the students can use the example on the front to complete the definition on the back. The online glossary uses motion and sound to define the words and can be used in English or Spanish. In the "Lesson Overview," the materials highlight the mathematical vocabulary being introduced or practiced with the lesson. On Day/Step 2 ("Visual Learning") of each lesson, the video also highlights the math vocabulary word; the "Glossary" icon is at the top of this page. The math vocabulary words are highlighted throughout the student workbook.

The materials provide opportunities for students to listen, speak, read, and write during discussions in Steps 1 and 2 of each lesson and during independent or small group work in Step 3. However, math vocabulary is not specifically targeted as a learning objective in the materials, and there is no evident support for the teacher to lead an explicit vocabulary lesson. Discussion questions typically contain math vocabulary, but there is no prompt for the teacher to require students to respond using the math vocabulary.

The materials provide supplemental resources in the form of word cards. These are available at the beginning of every topic in the student workbook. The front of each card contains the vocabulary word and a visual that illustrates the concept. For Topic 2, the vocabulary words are *commutative (order) property of addition, identity (zero) property of addition, associative (grouping) property of addition, estimate, compatible numbers,* and *inverse operations*. On the back of these cards, students complete the definition by rewriting the vocabulary word found on the front. Students can also "build math vocabulary by using the online, bilingual animated glossary that uses motion and sound to build understanding of math vocabulary."

Topic 5 includes the following word cards: *multiply, identity property of multiplication, commutative property of multiplication, associative property of multiplication,* and *zero property of multiplication*. The vocabulary words are defined by the characters in speech bubbles throughout the student textbook. Three of the vocabulary words from Topic 5 are found in the "Review What You Know" section of Topic 6. However, the Teacher Edition Topic Planner simply states: "Build math vocabulary using the word cards, glossary, and online animated glossary."

In Topic 12, geometry vocabulary is critical. Lesson 12-1 highlights the geometry vocabulary words on the "Visual Learning" day (Day 2). Materials ask, "What are some attributes of quadrilaterals?" The Visual Learning video explains each vocabulary word critical to geometry by showing the word in orange font along with a visual representation. Students use these vocabulary words as they complete the "Quick Check"; they identify shapes and describe attributes. Students construct arguments, writing about "how a rectangle and a rhombus are alike and how they are different." This lesson is an example of students applying the vocabulary in writing. The sample student answer uses the words *parallelogram*, *angles*, and *right angles*. There is little evidence of the materials providing repeated opportunities for students to speak using the mathematical vocabulary within this lesson. Students then sort quadrilaterals into different groups; they are allowed to use informal language as they sort the quadrilaterals. During the discussion, summarizations and generalizations are made: Angles are described as "square corners and opposite sides are the same length." The next day, students learn the formal language when they identify square corners as right angles and opposite sides that never touch as parallel sides. Students look for things in the room that have right angles and parallel lines. There is no evidence the materials provide scaffolding suggestions within the lessons to support students' development and use of academic vocabulary in context. The materials do

not use sentence frames or discussion starters to scaffold the use of vocabulary when speaking and writing about the mathematics within the lesson.

2.7 Materials provide opportunities for students to apply mathematical knowledge and skills to solve problems in new and varied contexts, including problems arising in everyday life, society, and the workplace.

- Materials include opportunities for students to integrate knowledge and skills together to successfully problem solve and use mathematics efficiently in real-world problems.
- Materials provide students opportunities to analyze data through real-world contexts.

Meets 4/4

The materials provide opportunities for students to apply mathematical knowledge and skills to solve problems in new and varied contexts, including problems arising in everyday life, society, and the workplace. The materials integrate real-world problem solving throughout the three-step lesson plan format and within the student workbook. An explicit problem-solving lesson at the end of each topic integrates the process standards with content and skill TEKS and also incorporates real-world story problems. A problem-solving handbook is an additional lesson component that teaches a specific problem-solving model. Also, problems involving the use of data are incorporated into the three-step lesson plans. An additional component called "Today's Challenge" offers five additional problems that increase in rigor throughout the unit and use the same data set.

Evidence includes but is not limited to:

The teacher materials contain a "Problem Solving Handbook" that is designed to help students organize their math processes and problem-solving strategies in the problems they solve every day at the start of daily lessons. The materials suggest that the teachers display a list of strategies, tools, and techniques with explicit names that students can refer to as they participate in problem-solving discussions. The teacher materials include samples of various strategies, including using strip diagrams, drawing a picture, writing equations, and using reasoning. There is also a blackline master of a "Problem-Solving Recording Sheet," which is a graphic organizer to help students show their work and make sense of problems. The recording sheet includes a list of strategies that students can use as they plan how they will work through

the problems. There are a few samples of how to complete the worksheet in the explanation of this component, but the samples are not included in daily lessons.

Throughout the materials, each topic has a section called "Today's Challenge Online," which includes sets of five problems that increase in difficulty and use the same data. Each set also includes "Factoids" and "Write Your Own Problem" sections to extend students' knowledge and thinking. A page of notes for each problem is in "The Today's Challenge Teacher Guide"; it includes teaching actions organized under "Before," "During," and "After." The program contains some opportunities for students to solve real-world problems in a variety of contexts. The "enVisionMATH Texas 2.0 User's Guide" states that "Solve and Share" opens each lesson with a rich problem for students to discuss and share solution strategies. Teaching actions keep students on a path to higher levels of cognitive demand. The student workbook has a mix of short-answer, multiple-choice, and long-answer problems. The story problems used throughout the workbook are often set in real-world situations.

In Topic 1, Today's Challenge is centered around the climate of Texas. Students analyze a data table about the weather on January 24, 2012, for seven different Texas cities. Every day, students solve a different problem relating to the data set. On the first day, they find the difference between the highest temperatures in two cities. Students explain how they solved the problem. In Lesson 1-1, students solve the following: "Cora sent two thousand, four hundred twenty-five text messages last summer. Evan sent 100 more text messages. Write the number of text messages Evan sent in expanded form."

As a curriculum designed with problem-solving at its core, the Solve and Share at the beginning of the lesson provides a word problem for students to solve. In Topic 2, Lesson 2-1, the problem asks if the total value of the cups on the left and the right are the same. Students solve and explain their answers.

In Topic 5, Lesson 5-7 ("Multiplication Facts"), students solve problems about pictures on a wall, canoes, flowers, stamps, and energy bars. Application to developmentally appropriate real-world contexts is very evident in the materials. Today's Challenge gives information about the prices of movie tickets for different ages. Students must use the data that is provided in a table to solve the daily challenge question each day throughout the topic.

In Topic 10, one of the "Activity Centers" includes a "Math and Science" activity; this allows students to apply learning in other content areas and sometimes represent math or research findings in a data table. One page explains the difference between inherited and learned traits and shows a data table about traits of children's' pets. Students write out the factors of some of the numbers they calculate from the data table.

In Topic 11 ("Understanding Fractions"), students analyze increasingly sophisticated visual models in order to find fraction equivalence. In the final lesson of the topic, students sort

fractions into groups based on size and support their answers with reasoning or models. This lesson incorporates the process standards, which helps solidify the concept by connecting fractions in context with the types of problems students see in their workbooks. The Teacher Edition builds background knowledge for teachers by providing an overview of how the process standards are incorporated and how concepts within the topic are developed with visuals or connections to other standards outside of the topic.

In Topic 13, Lesson 13-6, the Solve and Share poses a real-world word problem. In this lesson, students determine how many square yards are needed to carpet a square room when given the length of one wall. Students connect ideas and are asked, "What do you know about squares that can help you find the number of square yards of carpet Jorge will need?" Today's Challenge provides a factoid that explains that white light is actually composed of a rainbow of colors that are mixed together. When light shines through a prism, the individual colors can be seen. On Day 1, students determine how many solid figures included in a kit have no edges; on Day 2, students draw a copy of a quadrilateral formed by a laser beam and explain why it is a quadrilateral. The following day's content is always based on the previous topic of study. Days 3–5 continue to build from the factoid and diagram using concepts from previous topics.

Topic 15 ("Data Analysis") contains frequency tables, dot plots, pictographs, and bar graphs. Real-world contexts include favorite after-school sports, the 2010 Winter Olympic Games, and temperatures in April.

2.8 Materials are supported by research on how students develop mathematical understandings.

- Materials include cited research throughout the curriculum that supports the design of teacher and student resources.
- Materials provide research-based guidance for instruction that enriches educator understanding of mathematical concepts and the validity of the recommended approach.
- Cited research is current, academic, relevant to skill development in mathematics, and applicable to Texas-specific context and demographics.
- A bibliography is present.

Partially Meets 2/4

The materials include some research to aid teachers in understanding mathematical concepts and the validity of the publisher's approach to the lesson. There is little evidence that cited research is current, academic, relevant to skill development in mathematics, and applicable to Texas-specific context and demographics. Materials do not provide a bibliography.

Evidence includes but is not limited to:

The author team and well-known mathematicians bring an impressive level of experience as classroom teachers, teacher educators, researchers, and authors. They have written numerous professional articles based on their research and observations, and their contributions to the program is an implementation of successful teaching methods. The program offers an instructional model based on a research foundation and has proven efficacy shown by statistically significant advantages in independent, scientific research done with randomized controlled trials. enVisionmath2.0 meets ESSA's "Promising" evidence criteria. However, the materials do not cite research throughout the curriculum that supports the design of teacher and student resources. The user guide states that "Janice Corona from Dallas, Texas, and Jim Cummins from Toronto, Canada ensured quality ELPS instruction." However, the materials provide no further explanation or context of their credentials, role, or contribution that explains how they informed the materials' design using research-backed methods. The "Math

Background" and professional development videos designed to support teacher understanding of the content are not supported by or cited with research.

The materials do not contain an explanation of research or citations of research relevant to skill development in mathematics or applicable to Texas-specific context and demographics. Every topic in the materials does contain a short professional development video where a person speaks broadly and briefly about the pertinent material. While the video sometimes introduces clips of the materials, the speaker in the video is not specific about how the materials are contributing to student or teacher understanding. For grades 3–5, Jane F. Schielack, PhD., does provide the short (approximately two-minute) professional development videos for numeration and addition/subtraction, but the viewers do not know anything about her research-based guidance informing the design of the materials.

3.A.1 Materials develop student ability to use and apply a problem-solving model.

- Materials guide students in developing and practicing the use of a problem-solving model that is transferable across problem types and grounded in the TEKS.
- Materials prompt students to apply a transferrable problem-solving model.
- Materials provide guidance to prompt students to reflect on their approach to problem solving.
- Materials provide guidance for teachers to support student reflection of approach to problem solving.

Meets 4/4

The materials develop students' ability to use and apply a problem-solving model. The materials guide students in developing and practicing the use of a problem-solving model that is transferable across problem types and grounded in the TEKS by including a problem-solving handbook. The materials prompt students to apply a transferrable problem-solving model throughout the first two steps of the daily three-step lesson format. Students are always asked to think before solving: "What information are you given? What are you asked to find? What tools can you use?" From there, problem-solving steps vary but always end with generalizing and applying to a new problem. The materials provide guidance to support teachers and prompt students to reflect on their approach to problem solving.

Evidence includes but is not limited to:

The materials include a problem-solving handbook at the start of both the Teacher Edition and Student Edition. The steps used in the handbook align directly to the Process TEKS: "Analyze, Plan, Solve, Justify, Evaluate." The handbook also includes a step in which students discuss what tools, such as real objects or manipulatives, or techniques, such as mental math or models, can be used to solve a problem. The handbook includes a blackline master to guide students through the process. This document is a graphic organizer that can be used to solve any type of problem.

Each lesson includes a Solve and Share as step 1. Students work independently to solve the problem and then share their work, strategy, and results. Each topic ends with an entire

problem-solving lesson on a specific problem-solving skill, such as solving two-step problems and making a table. Characters in the Student Edition and Teacher Edition provide hints and problem-solving advice. Step 2 of every lesson concludes with students solving a variety of problems; all of these tend to include word problems. Some word problems are multiplechoice, and others are free-response questions. All, in varying degrees, require the students to apply the skills learned from the lesson using the problem-solving model.

In Topic 3, Lesson 3-1, the problem to be solved is "Find the sum of 327 and 241." Characters in the textbook provide hints. The hint for finding the sum of 327 and 241 is, "You can formulate a plan. Part of the plan might be to write the numbers in expanded form."

In Topic 10, Lesson 10-5, students make a table and look for a pattern to solve a problem. The lesson embeds the Analyze, Plan, and Solve components of the problem-solving model. In Lesson 2, students write five different addition or subtraction problems that balance the right side of the pan, which reads 7-4. The emphasis is on building understanding. The materials ensure that this is developmentally appropriate for grade-level students by posing a problem that all students can access with different problem-solving approaches. This strategy ensures that students can discuss, per the lesson's structure, which of these strategies is the most efficient and successful in producing a solution that integrates the knowledge and skills the lesson wants to highlight.

In Topic 11, Lesson 11-5, students think about what the problem is asking and what tools they can use to solve. During the "Visual Learning Bridge" (VLB), students reflect on the fraction naming conventions and how the model helps model the notation. In the end, students generalize what they learned, apply their thinking to a new problem, and use notation and a model to convince others of their correct thinking.

In Topic 12 ("Shapes and Solids"), the "Math Background" section, "Focus on Process," describes the two process standards 3.1B and 3.1G and how they are used in the topic. It explains how formulating a plan, breaking the problem into simpler parts, and solving each of those simpler parts is often used in solving geometry problems. In Lesson 12-4, students compare and contrast solid figures based on their attributes. Students work with partners; understanding is built as the teacher asks questions such as "What are you asked to do?" "What do you need to know to be able to compare the two solid figures?" Students receive hints and then share solutions so that the class can make generalizations.

In Topic 14, Lesson 14-7, in the Solve and Share, students receive the following problem: "Madison wants to exercise 30 minutes every day. Before school, she only has enough time to exercise for 10 minutes or less. One day, she exercised for 8 minutes before school and 22 minutes after school. This is one way she can exercise for 30 minutes. Give some other ways she can exercise before school and after school to reach her goal of exercising for 30 minutes each day. Solve this problem any way you choose." Students use strip diagrams, number lines, or tables to solve.

In Topic 15, Lesson 15-1, students determine how many units each grid line on the graph represents and explain how they know. Homework for the lesson is leveled, allowing the teacher to differentiate between students who need intervention, those who are on-level, and those who are above level. All assignments provide multiple opportunities for students to make sense of open-ended, real-world contexts involving mathematics. One problem for the on-level homework reads: "By just looking at the bars, how can you tell which sport got the most votes? The fewest votes? Which sports were they?" In Lesson 15-3, Solve and Share, the materials ask students to think about the symbols in a pictograph and how they help analyze data. The materials also ask what tools they have to solve the problem. The final step has students generalize what they learned and apply their thinking to a new pictograph. During the VLB, students connect their knowledge of a sport to discuss what other symbols could be used on the pictograph.

In Topic 16, Lesson 16-3, students name at least three things people buy using the money they borrow. Students then share and discuss their solutions, prompting both the teacher and the student to reflect on their approach and the approach of others. The teacher summarizes and generalizes the work shown.

3.A.2 Materials provide opportunities for students to select appropriate tools for the task, concept development, and grade.

- Materials provide opportunities for students to select and use real objects, manipulatives, representations, and algorithms as appropriate for the stage of concept development, grade, and task.
- Materials provide opportunities for students to select and use technology (e.g., calculator, graphing program, virtual tools) as appropriate for the concept development and grade.
- Materials provide teacher guidance on tools that are appropriate and efficient for the task.

Partially Meets 2/4

The materials provide limited opportunities for students to select appropriate tools for tasks, concept development, and grade. The materials provide some opportunities for students to select and use real objects, manipulatives, representations, and algorithms as appropriate for the stage of concept development, grade, and task. The materials provide limited opportunities for students to select and use technology for solving tasks because even though they are available, it is unclear whether students can access them during lessons or independent enrichment time. The materials provide teacher guidance on tools that are appropriate for tasks, but there are only six mentions of the word *efficient* in the Teacher Edition (TE).

Evidence includes but is not limited to:

The materials primarily provide the teacher with the same materials as the students. They provide both teachers and students with the same problem-solving handbook, the same word problems (with the inclusion of the answer key), and the same "Visual Learning Bridge." There is little guidance about the tools introduced within the materials. While every planner does discuss the math processes and the content, it does not explain which tools are appropriate and efficient for which tasks. The professional development video that accompanies each topic does not explain the role these tools play in assessing and developing a student's conceptual understanding.

The "Background" section in the TE "Topic Planner" explains the process standards used within the topic. The "Problem Solving Handbook" provides multiple strategies and approaches for problem-solving. Problem-solving tools, as listed in the handbook, include tools, manipulatives, paper and pencil, and the Internet. Problem-solving strategies include mental math and number sense. Strip diagrams are heavily emphasized in the nine-page handbook, receiving four pages of explanation and examples.

The materials provide students with opportunities to learn to use grade-appropriate tools for solving tasks and understanding concepts, but students have few opportunities to select or compare tools for a given task. The lessons are sequenced so that tools or strategies become increasingly more sophisticated, incorporating representations or even mental math strategies, but the lessons typically ask for a specific tool to be practiced. The final lesson in each topic is always about problem-solving, yet these lessons are more focused on application in real-world settings rather than making connections across types of tools or strategies that can be used in the various problems.

The materials make references to using manipulatives during most lessons, but the use of digital tools is most often found in the third step of the daily lesson, in which students participate in center activities or a teacher-directed remediation lesson. One of the center activities includes a technology center, in which students can access one of six online games included in the program. There is also a set of online math tools with 12 different virtual manipulatives, including counters, place value blocks, number lines, and number charts. It is unclear from the materials whether students can access these tools during whole group instruction, so it may depend on the technology access within individual schools and districts. The materials make no effort to guide the teacher or have students discuss when virtual manipulatives or real hands-on tools would be more appropriate or efficient.

A set of digital tools accompanies every grade level on the materials' website. Both students and teachers have access to this digital tool suite. These manipulatives are used for concept exploration and attainment for the primary focal area(s) of the grade level. These tools can be manipulated digitally, which provides students with the opportunity to learn and use gradeappropriate technology for solving tasks and understanding concepts. While students can be provided with paper workbooks, each student can solve each problem through the digital platform.

In Topic 5, students learn to use patterns to solve simple multiplication problems. In Lesson 5-4, students are provided with a hundreds chart with patterns already marked. Students analyze the patterns and determine how the patterns were created.

In Topic 6, Lesson 6-5, students learn to write an equation to solve a real-world problem. One student work sample uses an equation to represent the problem; the other student sample models a strip diagram. As the discussion continues in step 2, the students are given a new

situation to solve using an equation and a strip diagram. To close this lesson, the materials connect the inverse operations of multiplication and division written in equation form. The equation is connected to the strip diagram.

In Topic 10, students use number sense to solve equations in which a question mark represents an unknown quantity. Strategies include trying to recall the fact that matches the equation. The materials explain that, as numbers increase, students must use other strategies for solving equations. Later in their studies, they will learn that using inverse operations is an efficient method; however, the materials do not state in which topic or lesson that efficient method will be introduced.

In Topic 11, students compare fractions visually using fraction strips, area models, or number lines. The materials do not explain whether one is more efficient, but they are sequenced from concrete to abstract.

In Topic 14, Lesson 14-1, students estimate the capacity of a one-quart container based on the capacity of one cup. The students are given cup and quart containers to determine if their estimates were reasonable. This part of the lesson prepares them to choose an appropriate customary unit and tool for measuring capacity and how to estimate and measure capacity using customary units in the next part of the lesson. Pictorial representations of real-objects are used to help students conceptualize customary units of capacity (e.g., a gallon of tea, a bucket, a squirt bottle).

In Topic 15, Lesson 15-3, the lesson begins with students reading a pictograph. As the lesson progresses, students read and interpret data from a pictograph and a bar graph. As the lesson closes, the technology center activity has the students using the "Data and Graphs" tool to create a graph using the data provided. Students interpret the data as they answer questions.

3.A.3 Materials provide opportunities for students to select appropriate strategies for the work, concept development, and grade.

- Materials prompt students to select a technique (mental math, estimation, number sense, generalization, or abstraction) as appropriate for the grade-level and the given task.
- Materials support teachers in understanding the appropriate strategies that could be applied and how to guide students to more efficient strategies.
- Materials provide opportunities for students to solve problems using multiple appropriate strategies.

Meets 4/4

The materials include teacher prompts on student usage of appropriate techniques (mental math, estimation, number sense, generalization, or abstraction) to solve problems. There is evidence that the materials also support teachers in understanding the appropriate strategies that could be applied and how to guide students to more efficient strategies. They also provide opportunities for students to use multiple strategies to solve problems.

Evidence includes but is not limited to:

The "Topic Planner" describes the content of each lesson by listing the TEKS and ELPS, "Essential Understandings," materials and resources, and suggestions for professional development videos to help teachers build their background knowledge of the content or their teaching skills. The "Math Background" section explains how process standards and content TEKS are developed with visual models and relational thinking. Each lesson includes a specific background section that describes how previous learning will be used in the context of the new lesson with either the same models or applied to new ones.

In the "Problem-Solving Handbook" section at the front of the Teacher Edition (TE), there is a generalization that says, "Because many problems can be efficiently and accurately solved in different ways, students are likely to use different strategies for solving problems. When discussing solutions, look for and have students share different approaches." Step one of every lesson reminds teachers to have students share their responses.

For example, in Topic 4, materials provide the teacher with multiple ways for students to understand the meaning behind multiplication: repeated addition, arrays, number lines, groups, comparisons, and area models. Strategies are taught to students and explained to teachers, but there is little support to guide students and teachers to the most efficient choices. Each lesson in the topic presents the students with one specific strategy and activities to practice utilizing the strategy.

In Topic 7, students learn to use a related multiplication fact to solve a division fact. Students have the option to use two-sided counters to make an array model. The materials tell teachers that this is the most efficient strategy for solving division, but it is never told directly to students.

In Topic 10, the materials support teachers in understanding which strategies are appropriate for solving a task and guiding students toward increasingly efficient strategies. Math Background describes how students use number sense to write and solve multiplication and division equations. Students increase their flexibility in terms of using operations on both sides of the equation rather than simply believing that the expression with the operation goes on the left and the right side is the answer. The "Solve and Share" begins the lesson with students using a pan balance to represent a multiplication or division equation. As the lesson progresses, students learn to use multiplication and division facts to decide whether both sides of an equation are equal. The materials prompt the teacher to ask questions such as "How does the pan balance show that the two sides of the equation are equal? What makes these equations different from other equations you have seen before? How else could you represent the math in the problem?" As the lesson closes, students learn to determine the value of unknown numbers.

In Topic 11, Lesson 11-3, the lesson objective is for students to represent fractions on a number line. A sidebar in the materials says, "If students are having difficulty using the number line, then have students make a list of key information in the problem and make sure they include each piece of information on the line." In the first part of the lesson, students practice by dividing strips of paper into equal parts or by making marks on a representation printed in the Student Edition (SE). In the second phase of the lesson, students use a number line or strip diagrams to solve the story problems. In Lesson 4, students mark fractions on a number line. The SE pages have number lines with some fractions marked and others with blanks for students to write in the correct fraction value. In Lesson 5, students learn a fourth model to represent fractions, then use it to name a part of the length of an object. The final lesson in each topic is always a problem-solving lesson that highlights the use of reasoning to solve problems. Step 1 of the lesson uses a number line model. In step 2, there are 11 story problems; seven of them require students to use a number line.

In Topic 15, Lesson 15-3, in the Solve and Share, students read a pictograph by naming three facts about it. In the "Visual Learning" video, students use the key to interpret the number of

hockey teams in each league. The materials prompt the students to add each representation as 2+2+2+1 = 7. Then, materials prompt students to think of another way to count the number of teams; students count each hockey stick (1+1+1+1+1+1=7). Students compare data and answer a question. Materials prompt them to compare the pictures in each row and guide them to think of another way to determine how many more teams are in one league compared to another. Students find the total number for each league and subtract (7 - 3 = 4).
3.A.4 Materials develop students' self efficacy and mathematical identity by providing opportunities to share strategies and approach to tasks.

- Materials support students to see themselves as mathematical thinkers who can learn from solving problems, make sense of mathematics, and productively struggle.
- Materials support students in understanding that there can be multiple ways to solve problems and complete tasks.
- Materials support and guide teachers in facilitating the sharing of students' approaches to problem solving.

Meets 4/4

The materials provide opportunities for students to share strategies and approaches to tasks to develop students' self-efficacy and mathematical identity. The materials support students to see themselves as mathematical thinkers who can learn from solving problems, make sense of mathematics, and productively struggle; students can sometimes choose any method to solve a problem. The materials provide support for students in understanding that there can be multiple ways to solve problems and complete tasks through class discussions. The materials provide support and guidance for teachers in facilitating the sharing of students' approaches to problem solving with a brief list in the "User's Guide."

Evidence includes but is not limited to:

The materials foster a mathematical community in the "Solve and Share" at the beginning of each lesson. Students solve a problem and share their results. Materials explain: "Give students time to struggle. Research shows that as they think, conceptual understandings emerge." There are tips for facilitating problem-based learning. Teachers are instructed to make sure students know that they expect them to do the thinking and have students share their thinking with a partner, small group, or the whole class. Teachers also show that they value students' thinking even when they struggle. Materials also foster a mathematical community by providing the students with opportunities to work together in a game format several times within each topic. The Solve and Share has a "Share and Discuss Solutions" step. Students share their strategies almost daily as a part of the initial Solve and Share problem, during guided work, and during intervention or center work.

The ancillary materials include a User's Guide. In the section explaining the features of step 1 in the daily three-step lesson format, a callout box says, "In step one, be a facilitator as students solve a problem!" Underneath, there are "Tips for facilitating problem-based learning"; these briefly explain, in one sentence each, how to "Set expectations, Foster communication, Be encouraging, Use the language of the process standards." In step 1 of the lesson cycle, the materials always prompt teachers to have students share their solutions and then show the sample hints if needed. The prompts focus on thinking about the problem before any attempt to solve it, asking, "What is the question asking? What information do we already know? What tools can we use to solve?" This questioning helps students gain confidence in their ability to work on the problems on their own. As students begin the guided and independent practice pages in the Student Edition (SE), the materials allow students to attempt problem solving on their own before sharing with a partner or their class. The prompts for teacher intervention are phrased to show that the materials allow the students to struggle independently before the teacher intervenes: "If students are having difficulty..., then...."

There are images of characters within the SE that encourage students to see themselves as mathematical thinkers.

In Topic 8, students use base-ten blocks and mental math strategies to solve multiplication problems. Each of the five lessons highlights a different strategy, and students are given the freedom to use a new strategy they choose when solving problems.

In Topic 10, Lesson 10-2, students use a pan balance to represent an addition or subtraction equation. They write five different addition or subtraction problems that keep the pans balanced. This problem is an open-ended problem, and there are multiple ways to solve it.

In Topic 11, students learn various models to represent and compare fractions. In Lesson 11-4, the Solve and Share begins with connecting previously learned ideas about fractions and folded strips of paper. The materials then ask if using the paper strip model will help solve the new problem. Finally, students generalize and extend or apply similar thinking to a new problem. The problem-solving Lesson 11-13 has 11 story problems for guided and independent practice, seven of which require students to use a number line.

In Topic 12, Lesson 12-4, the Solve and Share begins the lesson with students comparing and contrasting solid figures based on their attributes. Students work in pairs to discuss their lists with one another and see if one can add to the other's list. Materials provide hints as students solve this problem. Students share and discuss their solutions.

In Topic 13, Lesson 13-1, students find a garden's perimeter made up of squares with side lengths of 1 foot. Students formulate a plan to use side lengths to determine the total distance around a garden. To foster analysis of the problem, students answer questions such as "What do you need to find? What information is given?" As students work on this problem, materials

provide hints as needed. For example, "If you know that each side length of a square in the grid stands for 1 foot, how can you find the length of a side of the garden? How can you keep track of the lengths that you have counted?" This part of the lesson closes as students share and discuss solutions, summarize, and generalize. In Lesson 13-3, students find the area of a rectangle and estimate the area of a circle by counting the number of square centimeters inside each. If students need hints, teachers ask, "Describe a rectangle. How can you make sure you are counting the square centimeters correctly? What do you notice about some of the square centimeters in the circle?" Students share and discuss solutions, summarize, and generalize. In Lesson 13-7, students find the area of the reading room floor not covered by a rug. The students are allowed to struggle and solve this in any way. Materials provide hints for those struggling. Students share and discuss solutions. The two "student samples" from the lesson show two different ways to get the same answer. This open-ended task lends itself to multiple ways to solve the problem.

In Topic 14, Lesson 14-2, the Solve and Share begins the lesson with students using benchmarks to help them list items that should be weighed using ounces or pounds. The teacher monitors students as they develop solution strategies, asking questions to help them analyze the problem, such as "What are you asked to do? What do you need to include with your list?" Materials provide hints as needed. Students share and discuss solutions, summarize, and generalize.

3.B.1 Materials prompt students to effectively communicate mathematical ideas, reasoning, and their implications using multiple representations.

- Materials provide students opportunity to communicate mathematical ideas and solve problems using multiple representations, as appropriate for the task.
- Materials guide teachers in prompting students to communicate mathematical ideas and reasoning in multiple representations, including writing and the use of mathematical vocabulary, as appropriate for the task.

Partially Meets 2/4

The materials prompt students to effectively communicate mathematical ideas, reasoning, and their implications, using multiple representations. While some prompts are not general enough to transfer to another task, the strategies presented can be used to solve problems independently, even if a particular lesson favors one particular model or strategy. A mixture of problems throughout each lesson requires short answers or fill-in-the-blank responses; there are also open-ended problems that call for an explanation of student thinking. However, there is little support for students to put their thinking into words using mathematical vocabulary. The materials do not prompt oral communication or the exchange or defense of mathematical reasoning. The materials provide prompts for teachers that are almost exclusively focused on concept attainment.

Evidence includes but is not limited to:

The materials provide opportunities for students to communicate mathematical ideas during the "Solve and Share" tasks (step 1 in the three-step daily lesson). Students also have opportunities to communicate mathematical ideas in their Student Edition (SE) when they show their thinking on the "Guided Practice" and "Independent Practice" problems. The materials contain tasks that can be solved using a variety of mathematical representations, though some lessons within a topic only highlight one strategy at a time. During the "Visual Learning Bridge" in step 2, there is a final problem titled "Convince Me" that asks students to explain their reasoning to solve a problem. However, these problems do not usually ask for a specific strategy or representation, nor do they require written responses; they do allow students an opportunity to organize their thoughts, show their thinking, and share with others.

In Topic 2, Lesson 2-1, students look at a picture of two cups to determine if the total of the two cups on the left is equal to the total of the two cups on the right. The cups have the numbers 4, 6, and 6, 4. Students can add to find the answer, or they can use the commutative property of addition. Characters prompt the student to use symbols, numbers, or drawings to find the answer. In each Solve and Share, materials prompt the teacher to share and discuss solutions; they do not prompt the teacher to have students share and explain their own thinking. Students communicate mathematical ideas in writing only, and there is no evidence of activities that require students to communicate verbally. The only place that students communicate with other students is possibly in the Solve and Share. The partner games focus on procedural fluency but do not require the communication of mathematical ideas in any format.

In Topic 6, Lesson 6-5, students receive a real-world problem and write an equation to help solve the problem. Teachers ask questions to build understanding and provide hints as needed. Students share their solutions. Teachers can share sample student work; the class summarizes and generalizes. Teachers ask students if there is more than one equation possible. Teachers prompt students to think about what they know about addition, subtraction, multiplication, and division. As the lesson continues, students receive another real-world problem to solve with the teacher. The teacher directly models the use of a strip diagram and an equation as two ways to solve this problem. Students have no further opportunities to solve a problem that allows them to select multiple representations. The lesson closes with worksheet practice problems.

In Topic 8, Lesson 8-2, students use place value blocks, array models, and representations of place value to solve the opening Solve and Share problem. Both sample work hints show representations of place value blocks, equations, and written explanations of how to find the product of two numbers. The "Convince Me" problem in this lesson is "Suppose there are 6 rows of cars. How would the partial products be similar to the partial products in the example above, how would they be different?" This problem does ask students to explain their thinking, and there is an opportunity to use multiple strategies; however, it does not require a formal written response. The first 15 problems in the student book ask students to complete an equation. Problem 16 through 23 of the story problems are open-ended enough that students could use any of the strategies from the lesson; however, the sample responses only show equations and do not offer guidance for teachers to support students with other strategies.

The vocabulary is developed using vocabulary cards. Teacher instructions in the Topic 8 "Topic Planner" state: "Build math vocabulary using vocabulary cards and the glossary in the SE and the online animated glossary."

In Topic 9, Lesson 9-4, students solve a multiplication comparison problem using a variety of strategies, including money models, mental math, an array, and the standard algorithm for multiplication. The two samples show different strategies. One shows a representation of money and an equation. The second sample shows the standard algorithm. In Lesson 9-4, in

order to have students communicate about math ideas, the teacher prompts, "How can you represent three times as much? How can you use place value to find the total?" These prompts can help students solve this particular problem, yet the questions are not easily transferable to similar problems. There is also a note to have students share and discuss solutions; however, the prompt states, "Start with student solutions. If needed, project and analyze both Student Work Samples (printed in the Teacher Edition) to show how to solve the problem using an array or standard algorithm." Although this particular problem shows multiple strategies to solve the problem, it does not specifically ask students to include more than one strategy as they solve.

In Topic 10, Lesson 10-2, students use a pan balance to represent an addition or subtraction equation. Students are told they can draw a pan balance to help them solve the problem. The lesson begins with 7 - 4 on one side of a pan balance and asks students to find the number that would make the pan balance equal. As the lesson continues, the questioning gets more complex with two equations on each side of the pan balance. The pages in the SE do not show the pan balance model but instead ask students to solve comparisons by writing an equal or not equal sign, finding the value that would make an equation true, and reading story problems that require them to write an equation using a question mark to stand for the unknown amount.

In Topic 12, Lesson 12-4, the Solve and Share begins the lesson with students making a list of how two solid figures are alike and another list of how they are different. Then, students share their lists with a partner. In the "Visual Learning Bridge," students see two examples of how solid figures can be sorted (shape of faces and number of vertices). The lesson closes with students creating a sorting rule for sorting. This lesson does not have students clearly communicate their developing reasoning about geometric figures and their attributes.

In Topic 15, Lesson 15-2, students place numbers in a bag and randomly draw them out. Students record the data on a dot plot. Teacher prompts include "How can you find which number is drawn the most often? How can you find which number is drawn the least often?" These prompts focus on math concept attainment. The prompts for the Solve and Share say, "Start with the student's solutions. If necessary, project Michelle's work to discuss how she communicated her understanding of a dot plot."

3.B.2 Materials provide opportunities to discuss mathematical ideas to develop and strengthen content knowledge and skills.

- Materials provide opportunities for students to engage in mathematical discourse in a variety of settings (e.g., whole group, small group, peer-to-peer).
- Materials integrate discussion throughout to support students' development of content knowledge and skills as appropriate for the concept and grade-level.
- Materials guide teachers in structuring and facilitating discussions as appropriate for the concept and grade-level.

Meets 4/4

The materials provide opportunities for students to engage in mathematical discourse in partners, in small groups, and whole class. The materials integrate discussion throughout to support students' development of content knowledge and skills. The materials offer limited guidance for teachers in structuring and facilitating discussions as appropriate for the concept and grade level.

Evidence includes but is not limited to:

The materials intentionally provide opportunities for students to engage in mathematical discussions in a variety of different groupings (e.g., whole group, small group, peer-to-peer). The "Solve and Share" problems at the beginning of each lesson provide opportunities for students to share their problem-solving. This sharing can be done in small groups or whole groups, which provides opportunities for students to share and discuss with others. The Teacher Edition (TE) contains guided questioning for concept attainment; however, there is no guidance for math procedures or norms. The materials do not provide sentence stems, sentence frames, or rubrics for active listening or responding.

In Topic 1, Lesson 1-6, a teacher prompt called "Share" states: "Start with students' answers. If necessary, project Jeremy's work and discuss how he ordered the numbers." The "Convince Me" section of Lesson 1-6 asks students to create five-digit numbers and order them from least to greatest. The "Extend Your Thinking" section of the same lesson requires students to write

out their thinking. The TE has a sample answer. There is no guidance for sharing the thinking via mathematical discourse.

In Topic 4, under "Extension," the TE states, "Have students work with a partner to make up similar problems. Then have them trade with other students to solve the problems." This trading provides an opportunity for mathematical discourse but does not provide any guidelines for the teacher.

In Topic 6, Lesson 6-4, students write a division story to go with "8 divided by 2 equals...." In the "Look Back" section, students draw a strip diagram to go with their word problem. As the lesson progresses, students are explicitly taught how to write and represent a division story. The lesson models the use of a strip diagram and pictorial model. At the end of this activity, students communicate mathematical ideas to one another as they compare division stories. The lesson concludes with guided practice, independent practice, and problem-solving on a worksheet.

In Topic 8, Lesson 8-4, students must estimate the product of a "2-digit by 1-digit" multiplication problem with any strategy they choose. The opening Solve and Share problem asks students, "What are you asked to find in this problem? Is there a number in the problem that is not given?" The questions during the "Visual Learning Bridge" (VLB) are a mix of open and closed responses. "Why would you want to estimate a product? Why do you compare the estimate to 200?" These two prompts would allow for more than one student to respond so the teacher could facilitate a discussion with the class. In the third part of the lesson, students who score high enough on the "Quick Check" can do the "Math and Science Activity." This worksheet explains how to measure an object's mass and then shows a chart with the mass of four fruits. Students must estimate the mass of four of each fruit. The second question on the page asks students to reason why the mass of the pear is more than the mass of the kiwi.

In Topic 12, Lesson 12-4, students learn about and sort different quadrilaterals. In the "Look Back" section, students describe how they sorted the shapes. As the lesson continues in the VLB, students are explicitly taught how to identify and classify quadrilaterals. The lesson concludes with guided practice, independent practice, and problem-solving on a worksheet. The materials provide opportunities for students to share their solutions at the beginning of the lesson.

In Topic 13, Lesson 13-9, students relate unit fractions with equal areas to represent an area problem. Students receive grid paper and must use three colors to show each part of the wall with a unit fraction. Materials guide the teacher to "build understanding and give hints as needed." Students share their solutions; the teacher shares sample student work; the class summarizes and generalizes. Students justify why a unit fraction can be used to label each area of the wall. As the lesson continues in the VLB, students are explicitly taught to use equal areas to model unit fractions. The lesson concludes with guided practice, independent practice, and problem-solving on a worksheet.

In Topic 14, Lesson 14-6, the Solve and Share begins the lesson with students using clock faces to help them determine the time elapsed during a movie. As the lesson continues during the VLB, students learn to find the amount of time that passes between a start time and an end time (elapsed time). Student discourse can be used in whole group, small groups, or with partners.

3.B.3 Materials provide opportunities for students to justify mathematical ideas using multiple representations and precise mathematical language.

- Materials provide opportunities for students to construct and present arguments that justify mathematical ideas using multiple representations.
- Materials assist teachers in facilitating students to construct arguments using gradelevel appropriate mathematical ideas.

Partially Meets 2/4

The materials provide limited opportunities for students to justify mathematical ideas using multiple representations and precise mathematical language. The materials do not assist teachers in teaching students to construct arguments using grade-level-appropriate mathematical ideas. Questions from the Teacher Edition (TE) or Student Edition (SE) that attempt to incorporate the Process TEKS are superficial and do not provide guidance for the teacher or student to construct written or oral arguments or incorporate justifications in their responses.

Evidence includes but is not limited to:

The materials do not support students in sharing their ideas with peers, small groups, or the class in a routine way. Although the materials support precise mathematical language in the form of word cards for each topic, they do not support the application of the precise mathematical language when students justify their arguments. The materials provide limited routines and structures teachers can use to facilitate student construction of arguments. The routine is evidenced in the "Solve and Share," where students solve a problem at the beginning of each lesson. They can use representations of their choice to solve the problem; however, students are not required to share their solution or to justify it.

The materials provide limited opportunities for students to construct and present arguments that justify mathematical ideas using multiple representations. Step two of the lesson, the "Visual Learning Bridge" (VLB), is where most questions using the Process TEKS are found. However, the prompts for the teacher are to facilitate discussion and are supported with routines to have students construct a formal argument with sentence stems or writing support.

In these prompts, there are no other question prompts or sentence stems students can use to create a written or oral argument. Students are not asked to use multiple representations or share their ideas with peers. The materials do not assist teachers in facilitating students to construct arguments using grade-level-appropriate mathematical ideas.

In Topic 1, Lesson 1-1, in the Solve and Share, students represent numbers in expanded form, standard form, and by drawing base-ten blocks. Students are asked to use multiple representations. Students are not asked to construct or present arguments that justify mathematical ideas.

In Topic 4, Lesson 4-2, students use arrays and repeated addition to solve multiplication problems. The "Extend Your Thinking" section asks if someone can make an array with two equal rows to show 23. Students must justify their answers and write their answers in the workbook. Students are not explicitly asked to share their arguments with others or to illustrate their answers with an array or by any other representation.

In Topic 6, Lesson 6-1, the Solve and Share begins the lesson with students exploring division as they solve a real-world problem any way they choose. The students are divided into pairs and receive 20 counters. They use counters or draw pictures to divide objects into equal groups in a sharing situation. Students share their solutions; two sample student solutions are available, if needed, while the teacher summarizes and generalizes. The "Look Back" section has students draw a picture to show how the counters helped them solve this problem. As the lesson continues in the VLB, students solve a division problem with strip diagrams and division sentences. The materials provide questions in the margins to engage students. Students are asked how division is different from multiplication. The "Convince Me" question asks students what would happen if three friends tried to share 13 toys equally. The lesson concludes with workbook practice questions. Seventeen of the 18 questions are open-ended. The students are asked to represent, explain, construct arguments, reason, and justify.

In Topic 9, Lesson 9-5, in the VLB, there is a "Justify and Evaluate." The first question asks, "Is there extra information that is not needed to solve this problem?" The printed sample answer says, "Yes, the height and weight of the pocket bike are not needed." The next question asks, "Is there missing information that is needed to solve this problem?" The printed sample answer says, "No, all of the information I need is given in the problem."

In Topic 10, Lesson 10-3, the prompt labeled "Construct Arguments" asks, "What makes these equations different from other equations you have seen before?" The sample answer says, "The first equation has operations on both sides, multiplication or division; the other has an unknown." There are no other question prompts or sentence stems students can use to create a written or oral argument with a beginning, middle, and end, or with a why, what, or how they solved the problem.

In Topic 11, Lesson 11-6, the "Justify" prompt refers to a problem in the independent practice section of the SE, which says, "Students draw number lines to justify their answers." The Construct Arguments prompt is the only support for the teacher to help students make a generalization of the learning: "How do you know that 4/6 equals 1/6 + 1/6 + 1/6 + 1/6?" The sample answer is, "I can show it on a number line or use fraction strips for sixths." There are no other question prompts or sentence stems students can use to create a written or oral argument with a beginning, middle, and end or with a why, what, or how they solved the problems in this lesson.

In Topic 13, Lesson 13-2, given a picture of a rectangle, students must find the perimeter and explain how they found it. Students share their solutions; two sample student solutions are available, if needed, while the teacher summarizes and generalizes. The Look Back section asks students how they could use addition and multiplication to find the perimeter. As the lesson continues, during the VLB, students find the perimeters of common shapes. Students are directly taught how to find the perimeter of a rectangle and a square when given a pictorial representation of each. In the Convince Me problem, the students are given another rectangle and must tell how to find the perimeter. The lesson concludes with guided practice, independent practice, and problem-solving. Thirteen of the fourteen questions are open-ended and involve explaining, analyzing, connecting, reasoning, and extending thinking.

In Topic 14, Lesson 14-3, students connect what they know about capacity and weight, including the units used to measure capacity and weight, to make a list of situations in which each needs to be measured. The materials assist teachers in helping students construct arguments as they give hints and share sample student work. In this lesson, the teacher shares sample work to discuss how to connect ideas to solve a problem. In the sample student's list, it states, "point out that you can measure the capacity of a can of soup as well as how much it weighs." The "Summarize and Generalize" section supports teachers by helping students capture the essential skills. For this lesson, students generalize that they can measure the capacity of an object when they want to know how much it can hold. They measure the weight of an object when they want to know how heavy it is. There are other opportunities for students to explain their learning in the Look Back and Convince Me sections, but there is no evidence that the materials list discussion questions and sentence stems in order to elicit different types of responses from students as they present their arguments.

In Topic 16, Lesson 16-6, the Justify prompt refers to one of the questions in the VLB; it says, "Students use mathematical language to justify why Ava couldn't buy jeans and a t-shirt." In the SE, questions ask students to look at the price of objects in a garage sale and decide whether the character, Ava, has enough money to make different purchase combinations. The sample answers only show equations with a one-sentence written explanation.

4.1 Materials include developmentally appropriate diagnostic tools (e.g., formative and summative progress monitoring) and guidance for teachers and students to monitor progress.

- Materials include a variety of diagnostic tools that are developmentally appropriate (e.g., observational, anecdotal, formal).
- Materials provide guidance to ensure consistent and accurate administration of diagnostic tools.
- Materials include tools for students to track their own progress and growth.
- Materials include diagnostic tools to measure all content and process skills for the grade level, as outlined in the TEKS and Mathematical Process Standards.

Partially Meets 1/2

The materials include developmentally appropriate diagnostic tools (e.g., formative and summative progress monitoring) and some guidance for teachers and students in their administration but do not include resources for students to monitor their own progress. The materials do include diagnostic tools to measure all content and process skills for the grade level, as outlined in the TEKS and Mathematical Process Standards.

Evidence includes but is not limited to:

The materials provide some guidance to ensure consistent and accurate administration of diagnostic tools. The "Math Diagnosis and Intervention System 2.0" (MDIS) includes a "Teacher's Guide for 3-6," which provides an individual record form and a class record form. The overview of this guide briefly details four areas. For assessment, it explains that an "Entry Level Assessment Form A" is given for a student entering a grade; "Form B" is used as a diagnostic test to check performance after providing instruction or intervention. For diagnosis, teachers use the "Class Record Form"; the MDIS gives a brief explanation of how to use the form to make placement decisions. "Intervention" lessons can be used for the content taught during the year. For monitoring, there is an "Individual Record Form" to help record student progress. Further in the MDIS, there are in-depth details explaining these four areas and instructions for how to use the system. The materials also include tips or recommendations to support consistent and accurate administration of the diagnostic tools.

Every lesson also contains a "Quick Check" that can be done either online or in the Student Edition (SE). The online version is a set of five multiple-choice questions that are scored online. In the student book, three of the problems in the independent practice pages are selected to be used as the Quick Check. These can be used to help prescribe differentiated instruction in step three of the lesson; however, record-taking resources are not provided for the teacher to track student responses or their progress in the use of various strategies and representations. The TE shows the assessments with an answer key. The TE does not provide guidance on administering the materials or even explanations of how to arrive at the correct answer. This lack is an issue throughout the materials. For example, in the Topic 2 test, the TE shows the two forms of the test with answers printed in pink. It also has an "Item Analysis for Diagnosis and Intervention" table that shows which intervention system to utilize for each question. Benchmarks are shown in the same way. No guidance suggests to the teacher what score on the test would result in an intervention. Intervention is a worksheet.

The materials include both a beginning-of-the-year placement test and an end-of-the-year test; each has 40 questions that are a mix of multiple-choice and griddable problems. After every four topics, there is a benchmark test composed of 24 questions, which are also a mix of multiple-choice and griddable problems. The materials state that these can be used as a predictor of success on state assessments. The instructional materials provide a "Texas Assessment Resources for Teacher's Guide." This guide contains performance tasks pages for students to complete and includes 4-point scoring rubrics that outlines the four levels of achievement for students' understanding of the concepts and skills in that topic as well as answer keys. Each task is composed of four to six open-response questions that look similar to those asked during the lessons or on the independent practice pages. The Guide also includes two "Practice Test Forms" with 48 questions each that model the format and rigor of the STAAR exam. There are also 53 online question banks grouped by TEKS. The materials include online "Quick Checks," which are editable; they are pre-formatted to include five questions, with topics such as "Making a Savings Plan" and "Metric Units of Capacity." When testing online is complete, students can see a score summary and review the question, their answer, and the correct answer. Materials do not provide explanations for finding the correct solutions.

Materials include the MDIS, Booklets A–J, which are identical across grade levels. A–E are targeted for grades 1 through 3. Booklets F–J are for grades 4 through 6. The digital link through the main portal is only a five-page PDF. However, the Teacher's Guide (found through the link at the end of the TE) includes an 83-page program overview with limited directions on how to use the system and recording forms for the class or individual student. When accessed through the "e-TE" tab at the end of the TE, there are provided TEKS correlations.

The materials also state that the online program assessment system can be used to edit the assessments included with the materials and that any district- or teacher-created assessments can be uploaded into the system; however, this resource was not made available for review.

The materials do not include resources for engaging families in providing input on student progress or understanding assessment results. The materials do not include questionnaires to incorporate input from families to support the teacher's understanding of the student's learning needs, and they do not provide information to families to support their understanding of students' learning needs and provide learning opportunities at home.

In Topic 6, Lesson 2, the "Solve and Share" begins the lesson with students using models and number sense to solve a division problem as a repeated subtraction problem. The teacher gathers information about student progress, asking questions to "build understanding" and "give hints as needed." To conclude this investigation, students state how counters or drawings can help them show their work. This statement is an opportunity for students to reflect on how tools can help solve math problems; however, the materials do not elaborate on the expectation of how students should respond via verbal or nonverbal responses as well as concrete, pictorial, and abstract representation of content and skills. As the lesson continues during the "Visual Learning Bridge" (VLB), materials explicitly teach how to model a division problem by drawing a picture. The materials' methods of assessment are appropriate to the developmental status and experiences of children. For example, during this part of the lesson, the materials guide the teacher to engage the students to use number sense by asking what the numbers and the unknown in the division equation stand for.

In Topic 13, Lesson 3, students find the area of a rectangle by counting the number of square centimeters inside the rectangle. In Topic 7, Lesson 1, students analyze the relationship between multiplication and division using arrays. For both of these lessons, during Solve and Share and the VLB, materials support the teacher with questions in the margins in the TE; a Quick Check follows. After this, in "Assess and Differentiate," students participate in the intervention activity. Each topic ends with a topic assessment; the item analysis answer key references an "Intervention System" lesson number from the MDIS. Further teacher support for the formal and informal assessments in the program is provided at the publisher's training website, which explains how to use assessment data to inform instruction. Support includes tutorials and downloadable resources for placement tests, topic assessments, performance tasks, lesson assessments, practice, cumulative assessments, state test preparation, and MDIS.

4.2 Materials include guidance for teachers and administrators to analyze and respond to data from diagnostic tools.

- Materials support teachers with guidance and direction to respond to individual students' needs in all areas of mathematics, based on measures of student progress appropriate to the developmental level.
- Diagnostic tools yield meaningful information for teachers to use when planning instruction and differentiation.
- Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.
- Materials provide guidance for administrators to support teachers in analyzing and responding to data.

Partially Meets 1/2

The materials include limited guidance for teachers and administrators to analyze and respond to data from diagnostic tools. The materials support teachers with guidance and direction to respond to individual students' needs in all areas of mathematics based on measures of student progress appropriate to the developmental level. Online diagnostic tools and paper-based assessments yield meaningful information for teachers to use when planning instruction and differentiation. The materials provide a variety of resources and some teacher guidance on how to leverage different activities to respond to student data. The materials provide guidance for administrators to support teachers in analyzing and responding to data. The materials include an online assessment and intervention system; however, these materials were not submitted for review, and so their quality and alignment to the indicators cannot be reviewed.

Evidence includes but is not limited to:

The materials do not include detailed trajectories of learning to support the teacher in understanding the progression of content and skill development. This information is needed to support teachers while interpreting assessment results and individualizing instruction. The materials do not offer suggestions to provide scaffolds for the content, process, or product of the concepts and skills being addressed within each unit. Overall, the materials lack support for

teachers to adjust instruction to meet student needs within mathematics based on data from developmentally appropriate assessments.

The materials include an "RtI Tier 2" set of intervention activities, center games, and leveled homework pages that teachers can use to adjust instruction to meet students' needs. These materials can be used during step 3 of the daily lessons. Placement into each of these activities is based on a five-question "Quick Check" given to students at the end of step 2 each day. An intervention lesson and leveled homework pages accompany every prime instruction lesson. The number of center games (worksheets) and online games varies with each topic. The materials also include an "RtI Tier 3" resource called the "Math Diagnosis and Intervention System 2.0" (MDIS), which interprets students' responses from online assessments to recommend activities for reteaching and intervention. The materials do not include guidance to support teachers in understanding the results of diagnostic tools and do not provide teachers with results that are easy to interpret. The information gathered from the diagnostic tools provides limited help to teachers in planning instruction and differentiation. After each Quick Check, materials provide an intervention activity, as well as enrichment activities for students mastering the content. Not every lesson in the materials has an accompanying intervention lesson; however, each of the math domains and primary focal areas has several lessons to support the concept or skill development. The lessons follow much the same format as the intervention lessons from Tier 2. The majority of alternative scaffolds favor teacher-directed questions or multi-step fill-in-the-blank questions with representations students can reference. For example, an intervention lesson that helps students add three numbers shows a place value block representation of each number on the page with fill-in-the-blank questions to add each place (ones, then tens, then hundreds), as well as a place value chart to show an alternative strategy. After adding three sets of numbers, the visual support is removed; students must add eight more sets of numbers stacked in the standard algorithm and then answer two story problems.

The materials include recommendations to support teachers in providing additional support to students struggling to master the curriculum. However, almost always, the materials provide the teacher with just one type of support. Materials provide worksheet-based activities to reteach, intervene, or challenge advanced learners. The Intervention seems to be a repeat of the lesson, presented in a very similar way as the original lesson. Sometimes a more hands-on approach is employed.

The "Record Forms" included in the Teacher Edition only serve to mark what questions students miss on a test and the TEKS alignment of each set of questions. Teachers receive a checklist template that can be used to track students' progress, but the results are not always easy to interpret. The information gathered from the diagnostic tools can help teachers plan instruction and differentiation, but the usage of these tools is very time-consuming. The material suggests that the teacher should "group students who need help with the same mathematical concepts." They also give some directions as to whether student performance on the diagnostic test can work in previous-grade-level or the next-grade-level materials. The resource also states: "If a student passes an intervention lesson, he or she is ready for the next

level of intervention of the concept. If the student does not pass, repeat the intervention lesson." If a teacher does not use the online assessment, he/she must pull several different resources together to find the appropriate Tier 3 intervention. First, the student data must be recorded on the individual or class record forms. Then, the teacher must look in the intervention materials to check the alignment of the TEKS from the questions they missed and find the matching intervention. Although each topic has an assortment of assessment opportunities, such as questions in the side margins, "Do You Understand" questions, Quick Check questions, and topic tests, the materials do not include guidance to support teachers in understanding results of diagnostic tools as they relate to the grade level and the level of support needed. The assessment results are not easy to read, nor do they support efficient and effective data analysis. It is not evident if the materials contain customizable reports to allow teachers to see developmental gaps at the individual and class levels.

The materials state that their online assessment system will identify students' skill gaps and recommend paths for intervention; however, a full preview of the system was not submitted for review.

The materials provide guidance for administrators to support teachers in analyzing and responding to data. On the "Online Assessment" system, materials state, "Individual and class views of progress are provided in an easy-to-view format. TEKS reports show mastery of individual TEKS." Assignment reports show the status of resources that have been assigned to students. Assessment reports show performance on items in the online assessments. Usage data reports show how much time students are spending in the online course. However, the online assessment program was not submitted for review. Materials do not provide guidance for administrators to support teachers in analyzing and responding to data. Materials include data that can be analyzed for individual students, classes, and the school. Digital assessments are taken online and auto-scored.

Materials support teachers with guidance and direction to respond to individual students' needs in *some* areas of mathematics, based on measures of student progress appropriate to the developmental level. Each lesson offers Tier 1 (normal classroom instruction), Tier 2 (small group worksheet-based reteaching), and Tier 3 (MDIS). For example, in "Intervention Booklet C," "Computation with Whole Numbers Grades K–3," the page begins with teacher notes and answer keys for each topic. After the teacher guide, blackline masters of the student worksheets are available. This intervention guide does provide the teacher with a 20-minute mini-lesson, although most of that time is worksheet based. There are, however, some parts of the lesson that are teacher-driven, and materials provide notes about error prevention and how to help if students continue to struggle.

In fact fluency, teachers are provided with blackline masters of timed-facts quizzes. The only instructions for teachers are printed at the bottom of the page. For example, the multiplication timed practice says, "Use anytime after Topic 5." Materials provide no suggestions for how to improve fact fluency; no suggestions for how, when, or how often to work on fact fluency; and

no advice or research-based facts on why fact fluency is important and what fact fluency looks like at this (or any other) grade level.

The publisher's Realize On-Demand Training offers guidance for teachers and administrators to analyze and respond to data from diagnostic tools, including the following:

Administrators Progress Monitoring and Reporting Realize Reports Administrator Guide Realize Reports: Getting Started for Administrators Realize Administrator Assessments Recorded Webinar Realize Reports FAQ Realize: Data and Security FAQs

Teachers Class and Student Data Review and Score Assignments Item Analysis Report

4.3 Materials include frequent, integrated formative assessment opportunities.

- Materials include routine and systematic progress monitoring opportunities that accurately measure and track student progress.
- Frequency of progress monitoring is appropriate for the age and content skill.

Meets 2/2

The materials include frequent, integrated assessment opportunities. The materials include routine and systematic progress monitoring opportunities that accurately measure and track student progress. These include daily summative assessments, end-of-topic assessments, and quarterly summative assessments. There is also a formative assessment at the start of each topic. The frequency of progress monitoring is appropriate for age and content skills.

Evidence includes but is not limited to:

The materials include an appropriate frequency of assessments that reflect the variable rate of student learning at this age. The materials for each grade level provide an online "Placement Test" at the start of the year and an online "End of Year Test," each of which has 40 questions that are a mix of multiple-choice and griddable problems. There is a review before each topic. Every lesson also contains a "Quick Check" that can be done either online or in the Student Edition (SE). The online version is a set of five multiple-choice questions that are scored online. In the SE, three of the problems in the independent practice pages are selected to be used as the Quick Check. These can be used to help prescribe differentiated instruction in step three of the lesson. There is an assessment after each topic; it occurs about every 2–3 weeks. Also, quarterly assessments can be found after every four topics. This benchmark test is composed of 24 questions that are a mix of multiple-choice and griddable problems. The materials state that these can be used as a predictor of success on state assessments.

The "Texas Assessment Resource Guide" at the end of the Teacher Edition also includes a performance task for each of the 16 topics in the program. Each task is composed of 4–6 open-response questions that look similar to those asked during the lessons or the independent practice pages. The guide also includes two "Practice Test Forms" with 48 questions each that model the format and rigor of the STAAR exam.

The materials include routine and systematic progress monitoring opportunities. The progress monitoring materials allow teachers to track progress using a spreadsheet to track individual students or an entire class. Assessments can be taken online and have a read-aloud feature. Answer choices include griddables and multiple-choice problems that are auto-scored. Online assessments can also be edited. Printable assessments for each topic come in two forms: multiple choice and fill in the blank. The materials also state that the "Online Program Assessment System" can be used to edit the assessments included with the materials and that any district- or teacher-created assessments can be uploaded into the system; however, this resource was not made available for review.

Progress monitoring occurs daily through the Quick Check in the workbook. Monitoring occurs at the end of every topic with a topic test. Cumulative monitoring occurs every four topics. Checklists can help teachers keep track of progress. Online assessments may or may not provide digitally aggregated data. The frequency of progress monitoring in the materials is appropriate for age and content skill. At this grade level, a daily assessment of 3–5 questions is appropriate. The five-question Quick Check at the end of every lesson is an appropriate daily progress monitoring tool. A chapter or unit test is also appropriate for this grade level. An assessment called "Show What You Know" can be administered before each topic to allow the teacher to modify instruction for students who have already mastered the content. The end-of-topic tests are suitable to measure summative progress and to compare growth when TEKS are spiraled in future topics.

5.1 Materials include guidance, scaffolds, supports, and extensions that maximize student learning potential.

- Materials provide recommended targeted instruction and activities for students who struggle to master content.
- Materials provide recommended targeted instruction and activities for students who have mastered content.
- Materials provide additional enrichment activities for all levels of learners.

Meets 2/2

The materials provide recommended targeted instruction and activities for students who struggle to master the content as well as for those who have mastered the content; they provide enrichment activities for all levels of learners. The overall lesson design supports diverse learners. Supports within each lesson include the use of hands-on or visual supports to help students develop conceptual understanding. There are lessons and support materials for struggling, on-level, and advanced students during and after each lesson. Intervention activities within the lesson reinforce the same model and problem-solving strategy used in the main lesson. Activities for on-level and advanced students provide extension within the same topic and encourage application to real-world tasks and discussion between peers.

Evidence includes but is not limited to:

Throughout the grade 3 instructional materials, each lesson is divided into three parts. Part one includes reviewing foundational skills, teaching the skill, reteaching, and an extension. The reteaching piece is meant for students who have not mastered the content, and the extension is for students who have mastered the content. Part two is the "Visual Learning Bridge," which supports the development of conceptual understanding using interactive features of "Problem-Based Learning" tasks, leveled games, and a step-by-step "Visual Learning" activity. Some of the lessons have leveled games, which are played in small groups of two or four. In addition, there are print and digital resources for both the students and teachers that support each lesson. These resources allow the teacher to assess student learning and determine if students need intervention or enrichment. The third step of the lesson is called "Assess and Differentiate," which includes a diagnostic page in the student workbook and allows teachers to reinforce and

extend students' learning. This step relies on the teacher using the provided "Quick Check" assessments from the previous portion of the lesson to prescribe differentiated instruction. An "Intervention Activity" is included for students who did not master the lesson content; it includes visual or hands-on practice followed by a "Reteach" worksheet that has step-by-step guidance for solving problems in order to strengthen concept attainment. There are also activities that are explicitly referenced as differentiated instruction for on-level and advanced students in the Teacher Edition (TE).

The TE contains a "Content Learning" section that includes prerequisite skills and future skills for every learning objective throughout the materials. In the TE, each lesson includes an "Essential Understanding" section, a "Math Background" section, and a "Skills Trace," which helps identify the skills from the previous grade level that are aligned to lessons in the current grade level in order to scaffold. This scaffolding document gives an overview of the skills that were learned in second grade that will help students master the third-grade content in each lesson. It also shows the third-grade skills that will be used as a foundation for fourth-grade content and skills. For students who continue to struggle to master content, the instructional materials include a "Math Diagnosis and Intervention System" that the teacher can access by a vertical grade-level band (K–3, 4–6) or by topic (the primary focal areas of K–5 mathematics as outlined in the TEKS). A teacher who is looking to address student gaps in place value, for example, can look at "Booklet A" and choose the lesson that addresses the discrete skill. Each intervention lesson focuses on three things: concept development, practice, and assessment. Concept development identifies in one sentence what the student will learn in the lesson. The rest of the concept development gives the teacher directions and questions to ask the student(s). The practice includes an error intervention that highlights the common mistake the student(s) may make. It also highlights what teachers can do if they have extra time and how to add to the lesson.

"Advanced Activity Centers" are found in the third step of the lesson throughout the materials and are geared toward students who mastered the lesson content based on the weekly Quick Check. The materials include extension activities for students to explore and apply new learning in a variety of ways. Teachers assign games, "Problem-Solving Learning Mat" activities, "Technology Centers," or "Math and Science Activities" for students to apply learning across other content areas. There are print and digital resources for both the students and teachers to support this step of the lesson.

The Activity Center choices provide a variety of online games, partner games, and small group games, and a research topic that allows students to apply the skills they learned in a variety of ways. One game, "Fancy Flea," requires students to calculate the fraction a flea needs to jump from one hot air balloon to the next. The game is rich with visual supports, including a fraction strip to help calculate the distance and fraction pieces that students click on to calculate the correct jump size for the flea. The games in Topic 11, Lesson 1, allow students who have a solid conceptual understanding of the conventions of fractions to apply that knowledge to make fraction puzzles using a finite set of number tiles to decide the numerator and denominator.

Another game in Topic 11, Lesson 11, asks students to compare fractions using fraction strip models.

In addition to the Activity Center, the materials provide opportunities for students who have mastered the grade-level content. Students examine their own work and the work of others so that they can analyze multiple strategies. Each lesson includes guided practice, independent practice, and problem-solving. Lessons also include a section called "Convince Me," where students justify or explain their thinking. In the "Solve and Share," in Topic 12, Lesson 1, students look at shapes and sort them into different groups. Then, they describe each group by formulating a plan. The Quick Check pages provide space for students to extend their thinking through sorting, labeling, and analyzing.

The final student workbook page for each lesson consists of mixed-review free-response problems. The last problem is labeled "Extend Your Thinking" and involves higher-order thinking skills. In Topic 1, on numeration, students consider what happens to the value of the 2 if the digit is moved from the thousands place to the hundreds place. "These exercises involve higher-order thinking" so that the student will "think more deeply about the rich, conceptual knowledge developed in the lesson." An Extend Your Thinking problem on the homework accompanies each lesson.

In the On-Level and Advanced Activity Centers, the TE references cross-curricular activities for each lesson. The Problem Solving Reading Mats connect reading, science, and social studies with mathematical content. This differentiated instruction is recommended for students "on grade level" and "advanced." Topic 1, on numeration, provides a reading selection focused on history that reinforces the idea that "zero doesn't always mean nothing." It reminds students to "use zeros to fill in the gaps of the place value chart" by illustrating that 1,400 years ago "Babylonians showed zeros by leaving small gaps between wedge marks in clay."

The materials include one cross-curricular project for each topic. The "Math and Science Project" for Topic 1 ("Numeration") asks students to research day-to-day record high and record low temperatures in different locations of Texas. In their research report, students may record temperatures in a table or write them in order from least to greatest or greatest to least. The Math and Science Project for Topic 11 ("Fractions") asks students to research volcanoes and represent data on a fraction number line or using fraction strips. In Topic 12 ("Shapes and Solids"), a research project asks students to find information about forest fires and the impact on animals and plants. Students draw a forest and describe the shapes used in their drawing.

5.2 Materials provide a variety of instructional methods that appeal to a variety of learning interests and needs.

- Materials include a variety of instructional approaches to engage students in mastery of the content.
- Materials support developmentally appropriate instructional strategies.
- Materials support flexible grouping (e.g., whole, small, individual).
- Materials support multiple types of practices (e.g., guided, independent, collaborative) and provide guidance and structures to achieve effective implementation.

Meets 2/2

The materials provide a variety of instructional methods. The guidance and support for teachers help them meet the diverse learning needs of all students, specifically addressing teaching approaches, instructional strategies, and flexible settings utilized to support the mastery of content. The materials support multiple types of practices (e.g., guided, independent, collaborative) and provide guidance and structures to achieve effective implementation.

Evidence includes but is not limited to:

Each lesson is divided into three steps. The first step is called "Problem-Based Learning," which engages students in the content with the authentic "Solve and Share" problem. The Teacher Edition (TE) includes student work samples and questions to help students think deeply about the problem and to analyze each other's work. The "User's Guide" section of the TE states that during the Solve and Share, teachers can foster communication by having students share their thinking with a partner, small group, or the whole class. This section also explains the six different "Teaching Actions" that are embedded in the Solve and Share problem. The first two teaching actions are used before beginning the problem in order to start developing students' understanding of the content required for the task. Teaching Action 3 is used during the Solve and Share as part of a whole-class discussion. The Teaching Action 6, "Extend," is optional. The second step is the "Visual Learning Bridge" (VLB), which supports the development of conceptual understanding using interactive features of Problem-Based Learning tasks and the step-by-step

"Visual Learning" activity. There are print and digital resources for both the students and teachers to support this step in the lesson. The VLB relies heavily on making connections between visual representations and symbols. Materials sometimes suggest concrete manipulatives depending on the topic and lessons.

In Topic 2, Lesson 1, each student receives 20 two-color counters. To build understanding, the teacher asks, "What information are you given in the problem?" and "What are you asked to find using the numbers on the cups?" The lesson suggests two hints if students are struggling. The teacher then shares and discusses solutions and summarizes learning: "Numbers can be added in any order and their total will be the same. This is the Commutative Property of Addition. Later in the lesson, you will learn about other properties of addition."

In Topic 12, students learn about different quadrilaterals when they cut out the shapes and sort them. As they explore, materials provide hints for struggling students and suggest extensions for early finishers. After students share their answers, the class summarizes and generalizes. The next day, students are explicitly taught the concept; the online video reinforces the lesson. Then, students solve questions on the "Quick Check." These student workbook pages have the headings "Guided," "Independent," and "Problem Solving." Based on the data, the teacher forms a small group of students who did not master the topic. Those students sort quadrilaterals with a partner and then work through the reteach page independently.

The materials show support for flexible grouping: Each topic begins with a problem-based activity that is whole group. The VLB is the next step. Students work in a whole group and possibly with partners. After the Quick Check, students are grouped for interventions. Intervention can be auto-assigned after a Quick Check, topic test, or benchmark test taken online. Customizable interventions are also available online.

Guided practice is supported in the materials with suggested questions and error analysis. Collaborative practice is achieved with center games, but the materials note that these games can be played independently. Reading mats provide opportunities for small group or independent practice. The Topic Planner tells the teacher to read aloud the "Reading Mat" before beginning the unit. The guidance for using the Reading Mat in Lesson 6.5 simply states: "Have students read the Reading Mat for Topic 6 and have students complete Problem Solving Activity 6-5." Independent practice is primarily achieved in the Student Edition with an independent practice section and two pages of homework. Students may also be assigned an independent research project.

The materials include recommendations for diagnosing student needs and assigning an appropriate intervention. The teacher guide for Topic 2, Lesson 7, recommends assigning "Reteaching Set E" on p. 129 as Tier 1 intervention (reteach) for students who are struggling. Every lesson has an "Intervention Activity" for students who scored 0–3 points on the Quick Check.

5.3 Materials include supports for English Learners (EL) to meet grade-level learning expectations.

- Materials must include accommodations for linguistics (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency.
- Materials provide scaffolds for English Learners.
- Materials encourage strategic use of students' first language as a means to develop linguistic, affective, cognitive, and academic skills in English (e.g., to enhance vocabulary development).

Meets 2/2

The materials include supports for English Learners (ELs) to meet grade-level learning expectations. The materials include some accommodations for linguistics (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency. The daily lesson format includes time for daily differentiation in which students of all levels can be provided with acceleration or reteach opportunities. Concepts spiral appropriately throughout the year and appropriately increase in depth and rigor for the grade level. The materials include linguistic accommodations for students who are learning English. The accommodations provide effective strategies that are scaffolded for individualized levels of English language proficiency. The materials encourage the strategic use of students' first language as a means to develop linguistic, affective, cognitive, and academic skills in English. The majority of graphic organizers included in the "ELPS Toolkit" include modifications that include native language support.

Evidence includes but is not limited to:

According to the "User's Guide," the Teacher Edition (TE) provides daily ELPS instruction that is used with a specific part of the lesson, such as the "Solve and Share," "Visual Learning Bridge" (VLB), or "Do You Understand?" sections. One or more ELPS are taught in each lesson. Leveled instruction includes suggestions for students at Beginning, Intermediate, Advanced, and Advanced High levels of English language proficiency. EL consultants Janice Corona from Dallas, Texas, and Jim Cummins from Toronto, Canada ensured quality ELPS instruction. The ELPS Toolkit provides additional support for ELs, offering additional activities for support. Each lesson provides instruction on one or more ELPS for ELs at the Beginning, Intermediate, Advanced, and Advanced High levels of English proficiency. The VLB in each lesson provides EL support. The "Visual Learning Animation Plus" provides motion and sound to help lower language barriers to learning. Questions that are read aloud also appear on screen to help ELs connect oral and written language. The VLB often has visual models to help give meaning to math language. Instruction visually organizes important ideas. The "Animated Glossary" is always available to students and teachers while using digital resources. Motion and sound help communicate the meanings of math terms. The glossary is in English and Spanish to help students connect Spanish math terms they may know to English equivalents.

At every grade level, the materials include the ELPS Toolkit, which is an 80-page English Language Proficiency Standards (ELPS) guide. The guide includes an "ELPS Overview," "Student Expectations for English Language Learners," and "Proficiency Level Descriptors." The ELPS Toolkit contains "Professional Development Articles" and "Graphic Organizers." The articles cover topics such as essential principles for building EL lessons, strategies for teaching ELs, vocabulary knowledge, and strategies. The materials encourage the strategic use of students' first language as a means to develop linguistic, affective, cognitive, and academic skills in English. The graphic organizers included in the ELPS Toolkit include modifications for native language supports. For example, on the "Frayer Model," the materials suggest students write the definition in their native language. This strategy is suggested by several of the graphic organizers. When students complete the "Vocabulary Word Map," the materials suggest they work in partners with those speaking the same native language and with one student who is more proficient in English. When using the "Think, Pair, Share" strategy in a lesson, the ELPS Toolkit suggests the teacher pair Beginning and Intermediate ELs with more advanced or native English speakers.

The ELPS Toolkit explains best practices and graphic organizers to use with ELs. The first article, written by Jim Cummins, "English Language Learners in the Math Classroom," explains the need for explicit language support in the math classroom to help students develop language skills needed to be regarded as a fluent native speaker of English. The article lists five instructional principles central to teaching ELs effectively, which the materials say are the basis of the "ELL Curriculum Framework" included in the materials. Strategies include identifying and communicating content and language objectives, front-loading the lesson, providing comprehensible input, enabling language production, and assessing for content and language understanding. The publisher used these five principles to infuse seven specific instructional strategies throughout the curriculum: model thinking aloud, partner talk, word lists, sentence frames, rephrasing, suggesting a sequence of steps to solve problems, and repetition. The Toolkit describes each of the five principles in detail. Both linguistic and non-linguistic supports and graphic organizers are included in the program.

Professional Development Articles also include "Five Essential Principles for Building ELL Lessons"; "Strategies for Teaching English Language Learners"; "Welcoming Newcomers to the Mainstream Classroom"; "Sheltering Instruction for English Language Learners"; "Vocabulary Knowledge and Strategies"; "Multilingual Thinking Words"; and "Teaching Math to Culturally and Linguistically Diverse Students."

6.1 Materials include year-long plans with practice and review opportunities that support instruction.

- Materials include a cohesive, year-long plan to build students' mathematical concept development and consider how to vertically align instruction that builds year to year.
- Materials provide review and practice of mathematical knowledge and skills throughout the span of the curriculum.

Meets 2/2

The materials include year-long plans with practice and review opportunities that support instruction. The materials provide a year-long plan for content delivery that is cohesively designed to build upon students' current level of understanding and provides clear connections between lessons and grade levels. The materials include guidance to support the teacher in understanding the vertical alignment for all focal areas in math TEKS in preceding and subsequent grades. The materials include routine and systematic progress monitoring opportunities that accurately measure and track student progress.

Evidence includes but is not limited to:

Every topic begins with a "Math Background" section that explains how process standards and content TEKS are developed with visual models and relational thinking. Each lesson includes a specific Background Section that describes how previous learning will be used in the context of the new lesson with either the same models or applied to new ones. For example, in Topic 11, "Fractions," the background knowledge for teachers around Process TEKS within fractions explains how students formulate a plan by creating or using a picture or interpreting a model. The section also explains how students can analyze relationships between unit fractions and fractions with a numerator greater than one by using a visual model to illustrate the abstract representation of the sum of unit fractions to create a fraction with size 1/b. The content explanation of fractions begins with an explanation of the conceptual conflicts between whole numbers and fractions and then goes on to explain the four fraction models that will be used in the topic.

In the Teacher Edition (TE) "Program Overview Guide," the materials provide several tools to support teachers and ensure concept development for students. The "Big Ideas" are the conceptual ideas of the program that provide conceptual cohesion across lessons, topics, and grades, as well as across TEKS and reporting categories. Big Ideas connect "Essential Understandings" that occur within and across lessons. Math Background at the start of each topic shows the Big Ideas and Essential Understandings for the topic. Another tool, "Grade 3 Contents," lays out the focal points and TEKS found in each topic. The "Pacing Guide" lists the number of days it takes to complete each topic. The materials also contain a "Scope and Sequence" for each concept, grades K–5. The chart is shaded to show the grade in which a particular concept has been introduced, practiced, and applied. The "Skills Trace" document, provided for each grade and topic, supports the teacher in understanding the vertical alignment for all focal areas in Math TEKS in preceding and subsequent grades. The materials' plan supports efficient planning for teachers by identifying directly-taught learning objectives within each unit as well as outlining opportunities for explicit connections to prior learning and review of other focal areas.

Every lesson also contains a "Quick Check" that can be done either online or in the Student Edition (SE). The online version is a set of five multiple-choice questions that are scored online. In the SE, three of the problems in the independent practice pages are selected to be used as the Quick Check. These can be used to help prescribe differentiated instruction.

The "enVisionMath 2.0 Content Guide" includes Big Ideas in Math, "Texas Focal Points," a Skills Trace, and a Scope and Sequence. Explicit pacing guidelines are not provided; however, the materials appear to be set up for a sequential progression, one lesson per day. The materials provide reviews and practice throughout the curriculum. All 16 grade 3 topics begin with a "Review What You Know" page; every topic concludes with a review and test; every four topics include a test covering all four topics. "Today's Challenge" also frequently includes the spiraling of the curriculum. Practice materials build upon previously taught content. All lessons begin with guided practice, followed by independent practice, and then homework. Materials contain consistent reviews in each topic in the form of a one-page Review What You Know, which contains a vocabulary review and mathematical concept review.

There is also an online professional development video at the start of every topic that explains what is covered in the topic and how it connects to other topics in the current and previous grades; it also shows how the visual models can be used to help students develop conceptual understanding. For example, the multiplication video explains that "different kinds of situations can be represented using multiplication but that each involves the joining of equal groups in some way." It then explains how the various models and joining strategies build into one another, including the repeated addition strategy introduced in second grade.

The Scope and Sequence lists color-coded strands that correspond to the TEKS; a visual chart displays when the strand is introduced, practiced, and applied throughout grades K–5. The focal areas in grade 3 have an emphasis on "Practice" lessons for each focal area. The materials

include a "Correlations Guide" that breaks the TEKS into smaller objectives and lists both the SE and TE pages that address those TEKS and objectives.

6.2 Materials include implementation support for teachers and administrators.

- Materials are accompanied by a TEKS-aligned scope and sequence outlining the essential knowledge and skills that are taught in the program, the order in which they are presented, and how knowledge and skills build and connect across grade levels.
- Materials include supports to help teachers implement the materials as intended.
- Materials include resources and guidance to help administrators support teachers in implementing the materials as intended.
- Materials include a school years' worth of math instruction, including realistic pacing guidance and routines.

Meets 2/2

The materials include implementation support for teachers and administrators. The materials provide a scope and sequence outlining the TEKS as well as the vertical alignment of the TEKS. There are some supports and pacing guidance throughout the materials that serve as a guide for teachers and administrators to monitor learning progress as well as implement the program.

Evidence includes but is not limited to:

The materials include a scope and sequence aligned to the grade-level math TEKS; it outlines the order in which the TEKS are taught. Another document describes the connections of TEKS across grade levels. The materials include an overview of how they provide support to teachers, describing the resources the materials contain. The "Scope and Sequence" indicates a majority of lessons support the development of the TEKS, especially the primary focal areas in each grade level. The materials include a sufficient amount of lessons and activities to support a full academic year of learning and include time for pre-teaching and re-teaching content and skills based on periodic formative assessments. The materials include a school year's worth of math instruction, including realistic pacing guidance and routines. The pacing guides and lesson plans give evidence that the materials include lessons and activities for a full year of instruction. The units can be reasonably implemented within the time constraints of a school year, and the activities and routines within each lesson can reasonably be completed within the length of time suggested. The materials include a "Correlations Guide" that breaks the TEKS into smaller objectives and lists both the Student Edition (SE) and Teacher Edition (TE) pages that address those TEKS and objectives.

The "Topic Planner" describes the content of each lesson, listing the TEKS and ELPS, "Essential Understandings," materials and resources, and suggestions for professional development videos to help teachers build their background knowledge of the content or their teaching skills. Each lesson includes sidebars with additional questions to support students in making direct connections between mathematical content. Some sidebars remind teachers to encourage students to use a concrete model or a representation or to specifically reference a whole class lesson or activity to activate prior learning of a topic.

The Scope and Sequence lists color-coded strands that correspond to the TEKS; a visual chart displays when the strand is introduced, practiced, and applied throughout grades K–5. The "Skills Trace" document highlights the current-grade-level TEKS listed in order by topic as well as correlated TEKS from the previous and next grade levels in an easy-to-read, three-column format.

The TE has a "Program Overview Guide," which supports teachers in understanding how to use the materials as intended. The materials have a "Getting Started" guide to support teachers in the first steps of using the materials; it contains a list of the included materials, an explanation of the lesson structure, recommendations for storage to access materials easily, and tips to prepare for instruction. The materials also have a "User's Guide" to support teachers; this includes a list of the included materials and their purpose, an explanation of the lesson structure, assessment resources, support for EL students, and guidance on where to find additional professional development. In the Program Overview Guide, materials provide several tools to support teachers and ensure concept development for students. "Big Ideas" are the conceptual ideas of the program that provide conceptual cohesion across lessons, topics, and grades as well as across TEKS and reporting categories. Big Ideas connect "Essential Understandings" that occur within and across lessons. "Math Background" at the start of each topic shows the Big Ideas and Essential Understandings for the topic.

While the materials do not include resources specifically stated to help administrators support teachers in implementing the materials as intended, the implementation and overviews for teachers would suffice in helping administrators support teachers in implementing the materials effectively. The materials include tools to support navigating the resources, including a table of contents in each unit as well as tabbed pages to identify weeks within units easily and to separate lessons from blackline masters and assessment tools.

The pacing guides and yearly plans give evidence that the materials include lessons and activities for a full year of instruction. In the Program Overview Guide, a pacing document shows the total number of days for each topic. The document shows a total number of 120 days

for instruction. Pacing assumes one lesson per day. Additional time may be spent, as needed, on review, remediation, differentiation, and assessment. The materials include a school year's worth of math instruction, including realistic pacing guidance and routines. It includes 16 on-grade-level topics and one "Step Up" topic that contains 10 days of activities and TEKS for the next grade level. The Step Up topic focuses on a different skill each day. Each lesson follows the same three-step format. The first step is to be completed in 10–15 minutes. Step two is to be completed in 20–30 minutes. Step three is to be completed in 15–30 minutes. This timing means each lesson can be completed in 45–75 minutes, which can accommodate any math block set by LEAs.

6.3 Materials provide implementation guidance to meet variability in programmatic design and scheduling considerations.

- Materials provide guidance for strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression.
- Materials are designed in a way that allow LEAs the ability to incorporate the curriculum into district, campus, and teacher programmatic design and scheduling considerations.
- Materials support development of strong relationships between teachers and families.
- Materials specify activities for use at home to support students' learning and development.

Meets 2/2

The materials support teachers in identifying the developmental progression of content and skills to ensure that students are supported with instruction organized to optimize their learning. The materials also provide a suggested sequence of units that considers the interconnections between the development of conceptual understanding and procedural fluency and provides recommendations about the required order of units if implementation requires a change in the suggested order of units.

Evidence includes but is not limited to:

In the "Program Overview," there are many tools to ensure the sequence of content is taught in an order consistent with the developmental progression of mathematics. This overview discusses the "Big Ideas" in mathematics for each grade level and highlights the "Texas Focal Points." A "Skills Trace" document shows which TEKS are taught prior to the current grade level and which TEKS will be taught in the next grade. The "Scope and Sequence" document lists the TEKS throughout grades K–5. It highlights when the TEKS will be introduced, practiced, and applied. The "Pacing Guide" identifies the suggested number of days to spend on each topic. Each component of a lesson is given a time frame (Step 1: 10 to 15 min; Step 2: 20 to 30 min; Step 3: 15 to 30 min.)
The materials provide support for LEAs to consider how to incorporate the materials into a variety of school designs. The daily lessons allow for instruction each day to range from 45 to 75 minutes so that teachers can decide whether to spend more time in the first step of the lesson as concepts are introduced or in the third part of the lesson, which allows for differentiation. The materials in step 3 incorporate other content areas such as reading and science and can be used as stations during other blocks of content instruction. The arrangement of lessons by topic allows LEAs to be able to shift topics in order to allow for cross-curricular lesson plans that may occur in project-based learning or STEM-focused classrooms. The online assessment program also allows for teacher- and district-created assessments to be entered into the system, included in reports used for planning instruction and differentiation. The online program offers flexibility in planning, teaching, learning, and progress monitoring. It is easy to navigate, assign resources, search, customize, plan, assess, and analyze data. The interactive rich-media lessons cover 100% of TEKS and ELPS. The lesson plans are customizable and can be organized by day, week, or month. District-created content or teacher's content can be uploaded. The materials can be aligned with the district framework. Topics or lesson content can be resequenced to match district-level curriculum guides or individual teacher's scope and sequence preference. Blackline masters can be edited for "Daily TEKS Review" and online assessments.

Savvas enVision Grade 3

6.4 Materials provide guidance on fostering connections between home and school.

- Materials support development of strong relationships between teachers and families.
- Materials specify activities for use at home to support students' learning and development.

Meets 2/2

The materials provide guidance on fostering connections between home and school. The materials provide support to develop strong relationships between teachers and families. The materials specify activities for use at home to support students' learning and development.

Evidence includes but is not limited to:

The materials' resource section provides teachers with one home-school connection for each topic, for a total of 16. The home-school connection begins with a very short letter (addressed "Dear Family") that provides a quick overview of the topic and includes an activity to do at home. The letter summarizes the TEKS included in the topic and suggests an activity to reinforce concepts at home. Letters are available in English and Spanish.

In Topic 11, the letter suggests that families gather 12 common objects, like forks, to model fractions 1/6, 1/4, 1/3, and 1/2, to solve homework problems. The letter also asks families to label a number line with fractions 0/8 through 8/8.

In Topic 13, the letter explains that students will be learning about two important measurement concepts: perimeter and area. This page gives families an overview of the content in the topic. The recommendations encourage the development of strong relationships between teachers and families. After the description of learning, there is an activity for the family. The home-school connection was found in the online resources.

Each topic also has a "Math and Science Project." The materials provide a paper copy of the Teacher Edition and Student Edition workbook. These are also found online as an "eText." The "Today's Challenge," "Solve and Share," and "Visual Learning Animation Plus" sections of the

lesson are interactive online. Students use a text box, writing tool, and eraser to show their work. The animated glossary and math tools are also available online. These online materials allow parents to work with their children on specific skills.

Savvas enVision Grade 3

6.5 The visual design of student and teacher materials (whether in print or digital) is neither distracting nor chaotic.

- Materials include appropriate use of white space and design that supports and does not distract from student learning.
- Pictures and graphics are supportive of student learning and engagement without being visually distracting.

Meets 2/2

The visual design of student and teacher materials (whether print or digital) is neither distracting nor chaotic. The materials include appropriate use of white space and design that supports and does not distract from student learning. Pictures and graphics are supportive of student learning and engagement without being visually distracting.

Evidence includes but is not limited to:

The materials are designed to support student learning; the daily three-step lesson format has predictable routines for students to follow. The Teacher Edition (TE) is designed with clear, designated places for important information; information is located consistently in the same place for each phase of a lesson or topic. The TE includes instructional support; information is clearly stated and easily identified on the pages. The sample student pages included are still readable, and the callout boxes are easy to read. The TEKS and "Math Background" sections consistently appear at the beginning of each topic. Supports for English Learners are on the first page of every lesson, along with the "Essential Understanding," TEKS, and suggested materials. The materials adhere to "User Interface Design" guidelines.

The materials include appropriate use of white space and design that supports and does not distract from student learning. The repetitive format makes accessing content easy. In Topic 12, Lesson 4, the "Solve and Share" has students compare and contrast solid figures based on their attributes. The student workbook page provides ample space for student work. As the lesson progresses, students consider different attributes to sort a set of solid figures in different ways. The pages of the student book for this lesson have large print, simple graphics, and plenty of white space, except on the "Quick Check" in the student workbook. The first page of the Quick

Check is the guided and independent practice, which consists of six questions; the second page is problem-solving practice, which consists of six questions. There is not sufficient room for students to show their work; however, the solid figures that are pictured are clear and concise, without being distracting.

Pictures and graphics are supportive of student learning and engagement without being visually distracting. The materials have clean, easily readable, and recognizable pictures and graphics for students that support student learning. The characters in the materials clearly offer encouragement, hints, and prompts. The diversity of the characters is a real strength of the program. The pictures and graphics for student use adhere to User Interface Design guidelines. The vocabulary cards are easy to read, and the pictures in the whole class lessons support concept development.

Savvas enVision Grade 3

6.6 If present, technology or online components included are appropriate for grade level students and provide support for learning.

- Technology, if present, aligns to the curriculum's scope and approach to mathematics skill progression.
- Technology, if present, supports and enhances student learning as appropriate, as opposed to distracting from it, and includes appropriate teacher guidance.

Not Scored

The materials' technology component aligns with the curriculum's scope and approach to mathematics skill progression. The materials contain technological components that enhance learning. The technology components align with the scope and sequence of materials and highlight skills related to the primary focal areas. The technology components support the materials' progression of math content and skills introduction and practice and are often used as part of the daily three-step lesson format. The materials contain digital features to enhance and not replace or detract from classroom learning.

Evidence includes but is not limited to:

The materials contain an online student textbook, online teacher textbook, some online games, digital "Today's Challenge," online "Visual Learning Bridge," digital and editable assessments, an active e-book, and online tools.

The materials include a variety of online games for students to practice individual math concepts. These are typically an option for students during math centers at the end of the lesson block. The Teacher Edition does not state that they are to be used daily, but they are often listed 2–3 times within a topic. The materials state the games "provide practice on the lesson content or prerequisite content." The games are rich with visual supports and animations and offer hints when students press the help button within the game.

For example, "Fraction Frenzy" requires students to select the correct operation and fraction in order to move a crane to the correct fraction on a number line so it can collect a robot. Every use of the crane depletes energy in the tank, thus encouraging students to make careful

calculations so as not to waste energy. Collecting five robots wins the round. "Cosmic Caravan" requires students to make an array of the correct size in order to power a rocket. In "Galaxy Hunt," students explore place value by collecting atoms of different values up to the millions place in order to reach a target. In "Robo Launch," students launch robots into machines to see how they change. Once they know the operation a machine performs, they must guess the value of a mystery robot. In "Goblin Globbs," students explore place value relationships by gobbling ten thousand and thousand globs to reach a target number. In the "Amazing Savings" game, students need to save enough cheese so they can collect a key and unlock a door to the next level. They can also spend cheese on special items within the game. "Addlt" has students practice adding three numbers with multiple digits using colorful shapes.

The materials contain technological components that enhance learning and are aligned with the scope and sequence of the program. The materials provide a consistent process for each lesson: "Solve and Share," then "Visual Learning," then "Assess and Differentiate."

Step 1, Solve and Share, introduces a lesson by giving students a problem in which some important math ideas are embedded. Students solve the problem in any way they choose. The Solve and Share is online and most helpful during "Teaching Action #4," which is "Share and Discuss Solutions." Students can share their solutions using the draw pad; the teacher can also write on the screen during the whole class discussion. The Solve and Share is assignable online to individual students. The teacher can also share sample student work.

Step 2 has an online component called "Visual Learning Animation Plus Online." During this step, there is direct instruction with the provided guiding questions. The animation and audio enhance learning, which is hosted by the avatar. There is a pause after a question, allowing for interaction.

The online component also has links to an animated glossary and math tools. As students navigate through the digital platform, the Solve and Share portion shows math tools found on the right side of the page (e.g., writing tool, text box). The tools are also available in Visual Learning (Step 2).

Materials do not provide guidance on how to use technology to support students. It is worth noting that online technology consistently had connectivity and loading issues and, at times, was completely inaccessible.