November 2020

Savvas Digits 6–8 Program Summary

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 6	100%	100%	100%	100%
Grade 7	100%	100%	100%	100%
Grade 8	100%	100%	100%	100%

Section 2. Concept Development and Rigor

- Materials concentrate on the development of the primary focal areas outlined in the TEKS.
- Students progress along the CRA continuum in some places of the materials; however, concepts do not logically sequence from concrete to representational to abstract (CRA). Materials provide limited support to teachers in understanding and developing students' progression along the CRA continuum.
- Materials somewhat support coherence and connections between and within content at the grade-level and across grade levels; resources somewhat 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

- Students do not learn a specific problem-solving model; however, materials include prompts for students to apply problem-solving strategies.
- Students have opportunities to develop their self efficacy and mathematical identity by sharing strategies and approaches to tasks and selecting appropriate tools for the work, concept development, and grade (e.g., calculator, graphing program, virtual tools).
- Materials 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 and guidance for teachers to monitor progress; students are not given methods to track their own progress and growth.
- Guidance is provided for teachers and administrators to analyze and respond to data; however, 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 do not include enrichment activities for students who have already mastered the content.
- Instructional methods 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; however, there is no specific guidance for implementation 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.

November 2020

Savvas Digits Grade 6

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 material content primarily aligns to the sixth-grade level TEKS throughout, building on concepts from one unit to the next and using consistent strategies across all units to develop students' content knowledge for grade-level TEKS. The program spirals primary focal areas throughout and the material clearly showcases focal areas of grade-level TEKS throughout the material. Materials strategically and systematically develop students' content knowledge by design to inform teaching and learning, and they include introduction and review of key concepts at all levels. The instructional material also provides opportunities for students to practice while building academic rigor in primary focal areas within and across units. Teacher guides give instructions for the implementation of the resources. The materials discuss the organizational reasoning for each topic, as well as information from previous grade levels and explanations of how this approach will be used in future lessons. The materials describe the philosophy behind the focus questions listed within the topic and the benefit to student content understanding. They provide multiple digital practice opportunities for the focal area skills, which can be completed in a variety of settings. The materials build in rigor on concepts throughout each lesson to achieve the intent of the primary focal areas. The materials provide supports and suggestions for implementing supports, including a variety of settings such as independent work, working in teams, and class discussions.

Evidence includes but is not limited to:

The material content primarily aligns to the sixth-grade level TEKS throughout, building on concepts from one unit to the next. For example, Topic 1 aligns with primary focal area operations with integers and positive rational numbers; Topic 6 and Topic 8 align with primary focal area expressions and equations to represent relationships; Topic 10 aligns with primary focal area ratios and rates, including using equivalent ratios to represent proportional relationships; Topic 14 aligns with primary focal area data representation. The primary focal student expectations are spiraled throughout the program. For example, 6.3D states that students will add, subtract, multiply, and divide integers fluently. This standard is spiraled in 17 lessons. Student expectation 6.4B, which states that students will apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates, is spiraled into 23 lessons. Likewise, 6.7D states that students will generate equivalent expressions using the properties of operations, and the expectation is spiraled throughout 35 lessons. The material clearly showcases focal areas of grade-level TEKS throughout the curriculum. The “Program Overview Guide” shows the alignment of focal points to each topic. For example, the sixth grade instructional materials contain seven units of study. Each unit contains between one and four instructional topics, and each topic contains between five and nine individual lessons. This structure results in a total of 18 topics and 111 individual lessons. Each teacher guide showcases grade-level TEKS alignment for each part of the lesson. Lesson plans also include grade-level TEKS covered in the lesson.

The materials devote most lessons to the primary focal areas for grade 6, as outlined in the TEKS. For example, the primary focus of 13 of the 18 topics cover ordering and using operations with integers and positive rational numbers, multiplying and dividing fractions as well as the outcomes when performing those operations, using ratios and rates including using equivalent ratios to represent proportional relationships, representing and solving real-world problems involving ratios and rates, using equivalent expressions, using descriptions, tables, graphs, equations and inequalities to represent relationships or situations, solving equations and inequalities, calculating area and volume, using properties of triangles—the key focal areas for the grade level. Key focal areas are elaborated on and spiraled throughout the material. The materials consistently showcase the primary focal areas throughout the units via the “Math Background” sections provided in each unit’s (and lesson) teacher guide. The materials provide a table of contents for all units with 18 topic descriptions, and within each topic, there are multiple lessons with a list of TEKS covered within those topics. For each unit, teacher preparation notes provide descriptions of each topic/lesson covered within the unit and the associated timing and TEKS, in addition to the primary focal areas covered within the unit. These primary focal areas line up with the TEKS. For example, the materials contain “Teacher Guide” planning documents that provide grade-level TEKS covered in the material, concepts covered in previous grade levels, and upcoming concepts covered in future grade levels. The material also provides a table with the lesson titles, which showcases where the primary focal areas are covered, along with suggested timing to spend on each topic.

The materials strategically and systematically develop students' content knowledge by design. The design of the materials informs the teaching and learning of math concepts and notes a systematic philosophy around the introduction and review of key concepts. The material takes a systematic approach to the teaching of each topic once any necessary remediation is made. The lessons begin with a launch, follow with examples, and end with a close and check whereby students explain in various manners their levels of understanding, such as how and why they chose an answer, error analysis, application to real-world situations, and verbal descriptions of the process used to find a solution. For example, the Program Overview Guide focuses on Flexible Design, stating lesson design requires students to talk about mathematics and demonstrate their understanding, all while raising student interest and achievement. Additionally, the Program Overview Guide defines rigor in multiple ways and addresses techniques to develop the teaching and learning of math concepts. Examples include developing skills and concepts with a depth of understanding, including content-specific focus questions at the start of the lesson and the end of the lesson, using essential questions throughout lessons to link smaller ideas to a whole coherent idea within and across grades and units, and using cognitively demanding tasks and a rich problem-solving model. The program provides multi-step problems throughout, as well as using algorithms flexibly, accurately, and efficiently. Standard algorithms are taught using visual models and digital math tools, creating a high cognitive level of core instruction. Problem-based interactive learning drives the core instructional model with problem-based learning at the start of each lesson. Each lesson incorporates teacher-guided questions for interactive and visual lessons. Opportunities to communicate thinking are included in topic projects, math vocabulary games, "Pull it All Together Tasks," and digital math tool activities.

The Program Overview Guide outlines the program essentials consistently included in each topic, such as prerequisite lessons, launch activities to introduce key concepts, vocabulary and key concepts highlights, examples providing students opportunities to practice, topic review lessons to revisit and summarize learning, and enrichment projects as extension activities. The materials discuss the organizational reasoning for each topic, as well as information from previous grade levels and explanations of how this approach will be used in future lessons. For example, unit lessons begin with a prerequisite lesson or enrichment activity to review or remediate students' prior knowledge of the content, which is then followed by the content lesson. Students are then taken through three practice activities that build on the content from each of the previous activities, the key concepts are revisited and reviewed, and finally, students can independently demonstrate mastery on the leveled homework assignments. Lesson 7-5 demonstrates the organization. The prerequisite lessons review writing, evaluating, and comparing expressions. The launch for this lesson connects student understanding of expressions and inequalities to a real-world long jump example. In part 1, students evaluate situations as represented by an equation or inequality, part 2 has students write inequalities for situations, and part 3 focuses on graphing inequalities. The key concepts go back to review the meaning of each inequality symbol. Finally, homework, for both struggling and advanced learners, allows students to demonstrate understanding.

The design of the materials informs the teaching of math concepts through the use of teacher guides. For example, the “In Class Notes” for Lesson 8-3 provide before, during, and after prompts for the “Launch,” “Problems/Examples,” and “Close and Check” for each TEKS covered. In another example, at the start of Topic 12, the “Teacher Preparation Notes” contain a section titled “Math Background,” which provides the teacher with information regarding concepts that students covered in earlier grades and the transition to current material. The material also embeds scaffolding, extensions, focus questions, and team collaboration/discussions in the document titled In Class Notes.

Each lesson includes opportunities for students to practice in different settings. Lessons include student companions for guided practice, leveled homework assignments that contain a variety of exercises at different levels of rigor, and a mixed review. The homework activities are printable and editable PDF documents, while the mixed review activities are interactive. Questions and tasks within and across units build in academic rigor to meet the full intent of the primary focal areas. For example, Unit A Lesson 2-3 asks students to use a number line to divide unit fractions. The second part of the lesson asks students to use the inverse property of multiplication to identify equivalent expressions. The third part asks students to use algebraic manipulation and apply the concept of multiplying fractions to finding the area of a rectangle. The fourth part asks students to create a story problem that aligns with a given division of two fractions problems. Unit B builds upon number and operation concepts in lessons on expressions and equations. The opportunities to practice build in rigor on concepts throughout each lesson to achieve the intent of the primary focal areas. For example, in Lesson 6-1, Part 1 requires students to identify equivalent expressions, then building to Part 2, where students write equivalent expressions, and finally Part 3, where students evaluate expressions using properties.

The materials also offer multiple digital practice opportunities for the focal area skills that can be completed in whole group, small group, and individual settings. For example, Lesson 5-3 provides a drag-and-drop activity (support) for classifying expressions in a digital setting, to be completed individually and then discussed as a class or discussed with partners. Students complete digital lessons with virtual manipulatives and have the option to work with a print student companion. The enrichment activities for each topic encourage students to engage with the focal areas in a real-world setting. For example, Topic 6 allows students to engage with the focal area expressions and equations by writing expressions for the cost of renting movies from various services and creating equivalent expressions using algebraic properties. Students also engage with the focal area of data representation by creating charts of their findings.

November 2020

Savvas Digits Grade 6

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

While the materials provide many manipulatives throughout the lessons, as well as the on-demand "Math Tools," they provide little support. The lesson videos and lower levels of practice use the manipulatives, but the "Teacher Guide" gives no information on using manipulatives. There are many online manipulatives provided, along with some suggestions for hands-on, tangible activities to assist with concept acquisition; however, these are not present for all lessons. Additionally, there are not always suggestions or guidance for an alternative manipulative in low-tech classrooms. The materials mention utilizing tools with lesson topics and make suggestions to help students progress along the CRA continuum in some places. For the most part, the material does not support teachers in understanding how students progress along the CRA continuum. Though there are opportunities for instruction to incorporate concrete, representational, and abstract thinking skills, these skills are not always introduced and taught along the continuum. Additionally, there is no clear evidence of the importance of the sequence for developing student understanding and learning.

Evidence includes but is not limited to:

The materials contain pictorial and abstract representations throughout but minimal concrete or digitally interactive manipulatives. While some lesson interactives contain virtual manipulatives, the program does not have varied types of manipulatives, nor does the program introduce various types of representations to increase rigor. Examples of illustrations or pictorial representations include the following. Student journals appear to be mainly abstract, though some show illustrations as representations, such as in the 12-1 Journal. Lesson 1-6, Part 3, allows students to extend the window to a coordinate graph to assist with graphing. Teacher

guides contain a “Fostering Student Engagement” section which refers to representational strategies, for example, Lesson 12-2, which suggests that teachers separate a rectangle into two right triangles to show students how to find the area of a right triangle; and some enrichment projects allow students to use interactive manipulatives, for example in Topic 13 Enrichment Project, students use computer-aided software.

The program does include a link in “Student Companion” to myMath Universe, an extension to the program that includes videos, games, and simulations. This ancillary resource is not aligned specifically to individual topics and units. The “Glossary” provides additional support for vocabulary words. The program also provides external links to interactive tools such as a number line, place value blocks, algebra tiles, and a coordinate graphing program; however, these are not tied to a specific topic or unit. Also, a “Math Tools” option is available, which houses number lines, place-value blocks, area models, fraction and percents, integer chips, algebra tiles, pan balance, coordinate grapher, 2-D shapes, 3-D figures, graph generators, probability, and a calculator. Some of these items are appropriate for the grade level and content, while others are not necessary or aligned to the grade-level standards. The online materials provide an array of manipulatives, pictorial representations, and abstract representations to introduce and practice mathematical concepts for many of the lessons. It should be noted that they are not explicitly used or suggested for use in all possible lessons. For example, Lesson 12-1 begins with a grid composed of moveable square tiles. Students arrange the tiles to form a square and rectangle and use the square units to associate with area calculation. The material suggests students select real-world objects as well, to use in the place of the grid, in addition to using the grid to sketch and label a model and identify each shape. The materials provide easy access to many math tools and manipulatives such as a number line, place value blocks, area models, algebra tiles, integer chips and 2-D geometry, and more. The toolbar provides each of these throughout the lessons and is embedded within appropriate lessons where applicable. The models, manipulatives, and representations are used for concept exploration and attainment for the primary focal area(s) of grade 6, and the materials teach the students how to use the manipulatives for their grade-level content. The materials increase in rigor, beginning with a launch to introduce the topic, followed by three lesson parts that increase in rigor and ending with the close & check activity that typically entails higher-order thinking. For example, in Lesson 4-1 Adding Integers, part 1 of the lesson provides a number line tool to assist in integer operations. This tool guides the students as they place/move integers along a number line. However, there are no alternatives provided for non-technology environments. Lessons also use manipulatives to give visual representations to abstract concepts. For example, Lesson 7-3 shows students how to use a pan balance to represent solving an equation while keeping the properties of equality. The Math Tools provide a pan balance but do not provide instructions to students on when they should use it, and the Teacher Guide does not instruct the teacher to implement the pan balance. An example video on using the pan balance to solve equations is shown in the previous lesson.

No evidence is found to verify that the material guides the teacher in identifying where students’ understanding is on the CRA continuum. However, some guidance exists that

supports teachers with instructional suggestions to help students progress on the CRA continuum. For example, the Lesson 8-1 Teacher's Guide states that teachers can use place value blocks to show different ways to split up the two types of orders, and Lesson 11-2 suggests that teachers allow students to use the Number Line tool to check their answers; topic planning guides do include a "Math Background" section that provides teachers with a generalization of tools typically used to build concepts.

The materials provide instructional suggestions for teachers to help students progress through the CRA continuum. For example, the teacher guide for Lesson 4-3 suggests that if a student struggles to solve the real-life problem using the given number line, they can open the Add & Subtract Integers mode of the online number line tool and label their arrows to visualize the movement in parts. Later in the lesson, the online practice uses a drag-and-drop activity where misplaced answers snap back to their original answer bank. The material gives follow up questions for students to complete error analysis. The materials assist teachers in recognizing student progression along the CRA continuum by describing the build-up from part-to-part in each lesson's Teacher Guide. For example, Lesson 5-4 systematically teaches students the why (using a real-life inquiry), how, and application of writing algebraic expressions. The materials suggest to teachers that students draw a clock for a concrete aid to help them develop an expression on their own. The lesson moves on to parts 1 through 3 with an ample amount of guidance in steering discussion, making suggestions, and possible correct answers or solutions from students.

Although the materials provide a variety of representations of the CRA continuum in lessons, there is no evidence that the materials support the teachers' understanding of the importance of the progression along the CRA sequence. Even within the scope of the lessons, the continuum might not always begin with the concrete representations. For example, Lesson 9-1 begins with pictorial representations and abstract ideas, completely skipping over the concrete. The materials include instruction on how students can use or create representations of math concepts in some locations. The representations are familiar and related to concrete objects with which they likely have previous experience. For example, in Lesson 9-2, the Student Companion instructs students to "Use number lines to find ratios equivalent to 8:10" This is the students' first interaction with generating equivalent ratios, and it utilizes a pictorial model, rather than starting with concrete representations. The lesson continues to scale factors, another new term; however, this time, there is no guidance on how to represent the thinking.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 2/4

The materials provide some coherence and connections between and within content at the grade-level and across grade levels. While the materials do provide prior knowledge and skills information to the teacher for reference, they provide little opportunity or information to the teacher or students regarding how these skills are connected. There is no support given for discussions to engage students in recalling prior knowledge. Additionally, aside from listing future standards for subsequent years, there is little support regarding the depth and breadth of content.

Evidence includes but is not limited to:

The sixth-grade instructional materials contain seven Units of Study, and each unit contains between one and four instructional topics. Each unit starts with a “Prerequisite Assessment,” consisting of 30 questions from prior grade levels and skills identified as skills necessary for content mastery in the current unit content. However, not all of the standards assessed in the Prerequisite Assessment align with the current content standards to be covered throughout the unit. Also, some of the standards assessed in the prerequisite assessment do align with the current grade level but are not taught in the unit, nor have they been taught in prior units. The materials provide familiar models from previous grades to build on students' vertical content knowledge and connect with future grade topics. The “Math Background” in the “Preparation Notes” explains the details. For example, Topic 1 Preparation Notes describe concepts covered

in previous grades where students have used a horizontal number line. Grade 4 uses this number line to compare and order decimals. Similarly, grade 5 uses it to graph ordered pairs in the first quadrant of the coordinate plane. The use of the number line continues in grades 7 and 8 to compare and order numbers and complete integer operations. The materials connect current grade-level topics to skills learned in prior grades, in addition to practicing those skills. For each topic, Preparation Notes explicitly describe topics covered in previous grades and what will be covered in grade 8. For example, after the Prerequisite Assessments, the topics begin with a "Prerequisite Activity" for all students with differentiated instructions that incorporate a review of concepts needed to move forward on grade-level work. The Prerequisite Activity for Topic 7 prepares students to solve equations and inequalities by reviewing how to write and solve simple expressions and reviewing inequalities.

The "Teacher Guide" for each topic contains a section noting required prior student expectations and the future student expectations that students are working toward. For example, Topic 1 notes the following: The sixth-grade instructional materials have 18 topics covering the sixth-grade math content. Each topic includes a Topic "Enrichment Project" and a "Prerequisites Lesson." Teachers assign the enrichment project to students who have shown mastery of the prerequisite skills using the Prerequisite Assessment. The project connects previously learned skills to higher-order thinking skills, communication skills, and technology skills. It also introduces concepts for the current topic. For example, Topic 1 includes student expectations 6.2ABCD and 6.3C. The project addresses the student expectations for 6.2BC. Teachers assign the Prerequisite Lesson to students who have not mastered the prerequisite skills in the Prerequisite Assessment. It introduces new content by building on concepts learned in previous lessons. The Teacher Guide for each topic gives the vertical alignment of the current content to inform the teacher about previous content and what the current content is building toward in the following grade level. For example, in Lesson 12-6, students must use the knowledge gained in Lesson 12-1 to find the area of the base shape of the prism to calculate the volume. The materials work with familiar models and strategies from previous grade levels to build knowledge to prepare students for future grades. The Math Background sections in each lesson highlight these progressions. For example, in Lesson 5-3, students build on the area of a rectangle learned in previous grades to calculate the volume of a rectangular prism by multiplying the area of the base shape by the height of the prism. The formula V=Bh is used in the eighth grade to calculate the volume of cylinders according to the TEA vertical alignment. For example, in Topic 12, the Math Background explains how students have been decomposing shapes since 2nd grade. In this lesson, students decompose all the shapes to understand their connections to the area of a rectangle formula, which they learned in fifth grade.

The materials include problem situations that require students to recognize and apply mathematical contexts outside of mathematics. For example, the "Student Companion" guide paired with Lesson 1-1 features a *Do you know HOW?* problem, posing, "A man enters a parking garage at street level (0). He parks on a level that is 4 floors below the street. What integer can represent where the man parked?" Then the *Do you UNDERSTAND?* problem asks, "What integer can represent the position of the bait below the water line? Explain," followed by a

picture of a fishing pole, with the line 18 inches below the water level. The materials present both problems in an open-ended format, and both apply the context learned in the day's lesson in a real-world situation. There is no evidence that the individual tasks within the material provide an opportunity for connection between mathematical concepts. Each Unit and Topic include standardized assessments at the end, which are inclusive of multiple concepts. There is no connection to other concepts for students to see the mathematical interconnectivity. The "Launch" section of each lesson presents students with a task to solve. After guided questioning by the teacher "Before," "During," and "After" solving the task, the section presents students with a *Connect Your Learning* page that relates the previous task to the concept highlighted in the following lesson. For example, Lesson 13-1 gives students a prompt with four triangles with all but one angle measurements labeled. The teacher guide prompts the teacher to ask guiding questions regarding the measurement of the square angle and to review acute, obtuse, and right angles. During this exercise, students make the connection that all internal angles of a triangle add to 180 degrees. The lesson parts develop content by introducing the mathematical concepts, as well as relating them to real-world problem solving. For example, in Lesson 13-4, Part 1 introduces students to the process of calculating a missing angle within a triangle, Part 2 builds on the understanding of finding missing angles in a triangle by requiring students to write expressions for finding the missing angle measurement, and Part 3 gives a real-world scenario of finding the largest angle of a triangular park for bench placement. The materials include tasks that allow students to build on mathematical ideas to make connections on how to use them as a coherent whole. No evidence was found that allowed students to examine the relationships and patterns within and across concepts.

The materials contain Math Background sections within the Teacher Guides for each of the 18 topics of the instructional resource. This section lists what learning took place in prior grade levels or within the current grade level and how this learning supports current topic material. For example, Topic 3 states that "In Grade 5, students looked at decimals in the context of the base-ten number system. They compared decimals to decimals and rounded decimals using place value understanding. They also began exploring decimal operations. In Grade 6, they work more formally with decimal operations and they begin to connect decimals to other forms of rational numbers, including whole numbers." Along with the Math Background, the materials consistently provide guiding documents for teachers in each unit, topic, and lesson that help teachers understand how topics build both within the unit or grade-level horizontally and vertically, below and above grade-level, although it occasionally lacks in clarity for upwards alignment.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 2/4

Although the materials are built around quality tasks and appropriate context, there is little guidance on modifying materials if necessary. There is evidence that topics within and across units increase in depth and complexity as the lessons progress and that the materials provide tasks that increase in the appropriate grade-level rigor. An explanation of math concepts and tasks can be found in the teacher guides for each topic and lesson, and teacher guides for specific lessons include guidance for teachers explaining how tasks build student efficacy by providing sample student responses and guidance questions for tasks at the beginning of, during, and upon completing tasks. The material is rich with meaningful tasks providing opportunities for students to apply mathematics in real-world contexts but does not guide teachers on revising lessons for student interests. No evidence was found on rubrics or keys to evaluate student discourse, nor was evidence found to support the teacher with setting up and reinforcing strong practices for student discourse. The materials provide topics and tasks that incorporate topical information that is of interest to students of their age and uses various tactics to make material relevant. The materials provide multiple supports for teachers to assist students in developing strong content knowledge but do not give guidance to teachers on personalizing the content for their students' interests. While the materials provide many

probing questions for students to discuss and internalize the content, they do not provide structured support for evaluating those discussions.

Evidence includes but is not limited to:

As a solely digital resource, the material sometimes guides students through the interactive use of simulations of concrete material, such as the use of scales in Lesson 7-1 to simulate balancing equations. The material includes representation models throughout the lessons, such as thermometers to illustrate integers in Lesson 1-1, number lines to illustrate equivalent ratios in Lesson 9-2, and area models in Lesson 12-1. Topics within and across units increase in depth and complexity as the lessons progress. For example, the material provides tasks that increase in the appropriate grade level rigor, such as in Unit C going from Ratios, a comparison of two quantities to Rates, two quantities measured in different units, and ratio reasoning, understanding appropriate representations to model proportional relationships, which is the comparison of two ratios. Within the topics, the lessons are at the appropriate level of rigor. Within the topics, such as Topic 7, the lessons build from expressions to equations, followed by balancing equations and increasing in difficulty by applying each operation and moving on to inequalities. The last lesson contains problem-solving, where students use multiple concepts to solve real-world application problems. The material guides students through the models and understanding with increasing complexity and rigor throughout each lesson. For example, Lesson 15 begins with a "Launch" activity, where students consider a hypothetical situation in choosing between two data sets representing groups. This type of data set is familiar to students at this point from the previous lesson on the topic. The launch is followed by the "Key Concepts" section, which teaches associated vocabulary using a dot plot with the data. In the next part of the lesson, students categorize various graphs by their level of variability, followed by using the data & graph tool to describe the variability and spread of a data set. In the homework, students complete application problems that incorporate what the student has learned about variability and other data related concepts to analyze data sets. For example, one question is, "If this stray value is removed, how is the range affected?"

Explanation of math concepts and tasks can be found in the "Teacher Guides" for each Topic and Lesson. For example, in Topic 8, the Teacher Guide explains how students will use various forms that illustrate patterns and relationships to assist with future skills in solving problems involving two-variable relationships. Teacher Guides for specific lessons include guidance for teachers, explaining how tasks build student efficacy by providing sample student responses and guidance questions for tasks at the beginning of, during, and upon completing tasks. Teachers' "Lesson Guides" also include lesson objectives that clearly outline what goals the tasks lead students to master. For example, one of the standards Lesson 8-1 covers is TEKS 6.6C: "represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$." One of the objectives states that tasks support students in analyzing relationships between variables using tables and graphs related to given equations, which are the $y = kx$ or $y = x + b$ equations. The Lesson Guides also reference mathematical process standards that promote student efficacy toward attaining and demonstrating mastery. The

materials include “Essential Questions” and “Math Background” in the Teacher Guide for each unit, topic, and lesson. Math Background details that this unit lays the groundwork for algebra. Topic Teacher Guides include Essential Questions and a breakdown of standards included in the topic, prior taught standards, and standards students will see in the future on the first page of the guide. For example, Topic 5 contains the Essential Question “Expressions allow you to write mathematical models to represent real-world situations. What is the power of mathematical expressions?” and the Math Background states, “the introduction to expressions is a gradual one…it is important that students have a solid foundation in algebraic expressions in order to understand how to write and solve equations.” Lesson Teacher Guides include the use of Lesson “Focus Questions” to build toward the overall Topic Essential Question and the overarching understanding. Math Background typically states previously learned topics. Additionally, lessons contain Lesson Objectives. For example, Lesson 5-1 has a focus question “How do exponents allow you to communicate more precisely to others?” However, it does not include a statement or guidance on how the response to this question can help guide students to the understanding of the Essential Question for the topic. The Math Background notes how students previously learned about numerical and algebraic expressions, what they learn throughout this lesson, and possible misconceptions that may arise. The material contains editable lesson plans but does not guide teachers in revising content for students’ backgrounds or interests.

The materials provide students the opportunity to apply math to different situations and real-world contexts. For example, the “Student Companion” sheet accompanying Lesson 5-1 starts with basic mathematical situations for students to work through. As the lesson progresses, the content begins to get more detailed, with the opportunity to justify thinking. By the end of the lesson, students use the newly learned concept and apply it to a real-world reasoning situation. There is also an opportunity to analyze errors. There is no evidence regarding how to modify tasks, though the provided lesson plans are editable. The material also emphasizes real-world applications at the end of the Topic through the use of problem solving in a grade-level appropriate context. For example, in Lesson 11-4, students use the skills acquired in Topic 11 lessons about ratio reasoning to draw conclusions in real-world scenarios. The real-world scenarios consist of choosing a basketball player for the end of a game based on their shooting results displayed in a table, utilizing a pie chart from a newspaper to calculate the actual amount of sports articles written with the use of percentages, and calculating the amount of copper needed to make alloy for nickels. However, there is no evidence on how the materials guide teachers to modify content to be relevant to their specific students, backgrounds, or interests. The materials progress through tasks to allow students to conclude by applying the content to real-world situations. For example, Lesson 8-1 presents students with a task of identifying independent and dependent variables in the amount of sugar in a soda as presented in a table in Part 4. Again, no evidence was found for personalizing and revising content based on student backgrounds or interests

While the material provides information on sample student responses, it neglects to provide guidance on anticipated student responses and how to modify instruction based on those

responses. For example, the teacher guides for each lesson include a set of questions to ask throughout the phases of the lesson, as well as sample student answers. In Lesson 5-1, Part 1 has a “During the Intro,” “While Solving the Problem,” and “After Solving the Problem” listed for teachers to utilize. Each question has a sample answer with justification. “What are some everyday quantities that are equivalent? Sample answers: 10 dimes and $1, 12 inches and 1 foot, 2 plus 2 and 4.” The materials provide guidance on the appropriate grade-level strategies to use on tasks, although the anticipated strategies do not increase in sophistication, and only one strategy is offered.

The material is rich with questions that support student discourse. The Teacher Guide for the topic poses an essential question that is open-ended and prompts deep discussion. For example, Topic 5 asks, “What is the power of mathematical expressions?” The teacher guides for specific lessons include additional questions narrowing the focus, for example, in Lesson 5-1, “How do exponents allow you to communicate more precisely to others?” Additionally, the “Connect Your Learning” section of the Launch poses open-ended questions that support student discourse. The material contains sample student responses to guiding questions before, during, and after lessons on the Teacher Guides and evidence of sequencing of the discussion. The material addresses students’ possible misconceptions in the “Solution Notes and Error Prevention” sections of the teacher guides. However, no evidence was found on rubrics or keys to evaluate student discourse, nor was evidence found to support the teacher with setting up and reinforcing strong practices for student discourse. When referencing the “Program Overview” guide for teachers, it states, “During instruction, share and discuss solutions provided with each digital Example and Got It? problem. These solutions foster communication during all parts of each lesson…” and that the “Do you know HOW,” “Do you UNDERSTAND,” and homework sections all “foster communication in ways consistent with the math process standards.” Yet, there are no details on implementing these communication elements.

November 2020

Savvas Digits Grade 6

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

While the material provides opportunities for developing procedural fluency in every lesson through its “Launch” and “Student Companion” activities, the opportunity to continue an ongoing, year-long plan is not evident or in place. A scaffold or extended fluency plan is also not evident. The materials provide discourse opportunities around conceptual understanding behind the fluency practice with the additional questions in the Student Companion pages and with the Topic Opener and Topic Close “Essential Questions.” The materials also provide opportunities for this development through emphasis on algorithms and building of number sense. The program overview provides guidance on finding fluency practice for each lesson, followed by conceptual exercises that tie both skills together. The material meets the majority of the guidance for each indicator, such as providing opportunities for students to choose an efficient and accurate strategy to problem solve and remediation lessons focused on fluency for students who show a need based on the prerequisite assessments at the beginning of each unit. However, while the material includes scaffolded homework, it has no extension activities specifically related to fluency for students who have shown mastery. Advanced students can find enrichment activities, yet many of those do not relate to number fluency and tend to focus on concept exploration. Also, while procedural fluency is required to show conceptual understanding in several tasks throughout the material, there is no year-long strategic plan given to teachers to build (or extend) fluency connected to concept development.

Evidence includes but is not limited to:

The materials contain a “Teacher’s Guide” or lesson notes that describe the design and purpose of fluency practice within the program and make connections to the development of conceptual understanding. For example, the materials explain the connection between the fluency within the lesson and the focus of the lesson in a lesson note to teachers, noting that the fluency practice supports students’ access to the concept of the day by supporting the quick recall of facts used throughout the lesson. There is no evidence that the materials provide support for conducting fluency practice with students or provide strategic discourse opportunities. Each launch presents an open-ended scenario for students to develop and demonstrate conceptual understanding utilizing a strategy of their choice. For example, Lesson 2-1 presents the following problem “Your favorite museum is 3/4 mile from your home. You walk 1/2 of the way there and ride the bus 1/2 of the way there. Tell how far you walk. Include a picture in your response.” The material provides strategic discourse opportunities around conceptual understanding behind fluency practice through Topic Openers and Topic Close Essential Questions. For example, the topic opener for Lesson 2-1 asks the students, “How is dividing by a fraction like dividing by a whole number? How is it different? How can the meaning of division be extended from whole numbers to fractions?” The lesson “Close and Check” asks students, “Is the product of two proper fractions greater than the fractions being multiplied? Explain.” While the material provides these opportunities, it has no outlined plan that supports determining how and when to conduct fluency practice.

The program overview guide states that algorithms are practiced for fluency in the “Do You Know HOW?” exercises provided in the Student Companion, with additional fluency practice provided in leveled homework. Following the fluency practice, the “Do You Understand?” exercises address the conceptual understanding of the lesson/topic. For example, in Lesson 3-1, the teacher guide states Exercises 1, 2, and 3 of the Student Companion on Do You Know HOW? have students use a formula to calculate simple interest and the number of years it takes for an investment to grow to a certain value. The guide also states the next two exercises for Do You Understand? are more application-based, one of them requiring a written response analyzing the possible differences in two accounts that earn the same rate of interest and the other necessitating error analysis.

The materials provide an opportunity for fluency practice connecting to concept development and expectations of the grade level; however, there is no evidence supporting a year-long plan to build fluency. The program partially uses rigor synonymously with fluency, stating that rigor means using algorithms flexibly, accurately, and efficiently. The materials provide opportunities throughout the year for this development through an emphasis on algorithms, which are practiced in the Do You Know HOW? exercises in the Student Companion, as well as the leveled homework exercises and mixed review homework exercises. For example, Lesson 11-2 asks students, “Do you know how to represent 75% on the grid? Explain why it is equivalent to 3/4.” Additionally, the material provides opportunities throughout the year for building fluency through building number sense with the “Prerequisite Lessons” and “Mixed Review Homework”

exercises. For example, Prerequisite Lesson r8 requires students to review and apply their understanding of writing and evaluating algebraic expressions. Again, while the "Program Overview Guide" briefly discusses these opportunities, the program does not present a strategic outlined plan that supports monitoring students' progress in building fluency. In Topic 3, the material focuses on operations with decimals. Each lesson within the topic has procedural and fluency practice within the Student Companion Guides. The last lesson of the topic is a mixed review of all concepts. The "Unit Assessment" after the completion of Topic 4 includes items from the content as well. None of the following units, topics, or lessons practice the content of Topic 3. The materials do not provide a year-long plan for building fluency that specifically describes fluency routines. However, the "Prerequisite Assessments" consistently act as a precursor to a lesson's increasing complexity in fluency to reach grade-level expectations. Additionally, the "Math Background" section includes procedural fluency suggestions for students. For example, the teacher guide for Lesson 9-4 states that students previously learned fractions and decimals represent part-to-whole relationships, and in a previous grade-level topic, students learned that ratios can be represented by fractions. In the current lesson, students learn that decimals can also represent ratios. The Math Background provides a suggestion to teach students the process of converting fractions to decimals.

The material integrates fluency activities with the development of conceptual understanding through its Launch activities, Do You Know How? activities in the Student Companion guides, and Mixed Review Homework exercises. For example, the Launch activity for Lesson 5-2 asks students to "Write two expressions that each equal 48. Have one expression contain a product and a sum. Have the other expression contain a product and a difference." The Do You Know How? question of the same lesson is "Do you know how to identify equivalent expressions?" On the Mixed Review Homework assignment, number 1 requires students to evaluate two simple numeric expressions (44-15 and 7x4). The Launch activities also provide opportunities for students to strategically and flexibly choose the appropriate strategies for grade-level tasks and efficiently and accurately solve these tasks by applying their conceptual understanding of number relationships and strategies. For example, Launch activity 5-5 requires students to analyze antique transit tokens and record the value of the tokens in different ways, explaining the information required to know the value of each token. The materials provide fluency activities that build foundational skills to support students' conceptual understanding. Students practice algorithms for fluency with the Do You Know HOW? exercises in the Student Companion, as well as the leveled homework exercises and mixed review homework exercises. For example, Lesson 3-1 connects the concepts learned throughout the lesson for exercise and practice. The materials provide opportunities for students to develop efficient and accurate strategies for number facts and develop an understanding of algorithms to efficiently and accurately solve grade-level tasks. For example, in Lesson 4-1, the materials support procedural fluency of the arithmetic of integers by connecting manipulatives, such as integer chips; and pictorial representations, such as number lines, to the algorithms for adding integers. This practice continues through Topic 4. The materials provide fluency activities integrated with the conceptual understanding of activities/discourse. For example, in Lesson 15-1, the Teacher Guide provides questions for student discussion of median and mean, including the calculation

or finding of each measure. The discussion also includes choosing the appropriate measure to represent the data set in different contexts and analyzing what the measure is saying or not saying about the data set. The materials contain strategies provided to students to efficiently and accurately solve algorithms for grade-level tasks, in addition to opportunities to choose appropriate strategies and apply to grade-level tasks. For example, in Lesson 4-1, after using the number line to model integer operations, a video explains a strategy using additive inverse, followed by a sorting exercise where students choose the correct expressions using the additive inverse, so the expression equals zero. Additionally, students use a number line to model algorithms throughout integer operation lessons to help connect algorithms to conceptual understanding. For example, Lesson 2-5 uses application problems in which the student strategizes how to solve real-world scenarios. The Launch section begins with the question, "What do you need to find to decide whether you have enough fencing?" followed by, "How can you find the missing dimension of the rectangular area?" In this task, the student applies their procedural fluency to problem solve. Following each lesson, the materials provide homework for students to practice their fluency in their conceptual understandings. Each homework section gives students 4–6 numerical practice activities, as well as 9–11 problem-based tasks related to the conceptual understandings of the corresponding lesson. The homework practice for students allows them to apply appropriate strategies for solving tasks per the corresponding lesson. For example, part 1 of the Multiplying Fractions lesson encourages students to use area models to understand multiplying fractions. Part 2 asks students to multiply numerators and denominators. The following practice asks students to choose the most efficient method for solving the problem strategically. The materials provide students with opportunities for applying conceptual understandings of number relationships within the lesson content. For example, lessons in Topic 4 give students opportunities to visualize the addition and subtraction of rational numbers on a number line and practice tasks associated with adding and subtracting rational numbers.

The material provides guidance for determining if students need differentiated support through "Prerequisite Exercises" and teachers' "Lesson Guides." Homework is auto-differentiated with built-in tutor support and auto-grading and remediation. The program uses the Prerequisites Assessment results to assign students into leveled learning groups. This differentiation includes leveled homework and mixed practice that can be assigned to each student. The material supports teachers in scaffolding fluency activities by activating prior knowledge and building background knowledge. The program does not support teachers in extending fluency activities for meeting fluency expectations of the grade. Also, the content of the assessments is heavily weighted on application rather than computational fluency. For example, the Prerequisite Assessment for Unit C includes arithmetic questions such as multiplying by zero or one, multiplying two-digit numbers, and applying the order of operations. Remediation lessons are then assigned, if needed, based on the prerequisite results. The materials provide intervention lessons and practice activities for students who are not on target with the prerequisite and content lessons. According to the Overview Guide, the intervention lessons are combined into 18 different clusters that focus on number sense. They are designed to help students meet grade-level fluency expectations when working with whole numbers, decimals, and fractions.

No evidence was found for extending grade-level fluency. The targeted intervention lessons provide scaffolding opportunities. For example, in the Lesson on Multiplying Decimals, the lesson video relates multiplying decimals to multiplying whole numbers using visual cues.

November 2020

Savvas Digits Grade 6

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 support student development of mathematical language by highlighting targeted new and review vocabulary in each lesson, providing discussion opportunities for vocabulary understanding, and incorporating vocabulary routines within the review sections of each topic. However, daily lessons do not incorporate vocabulary routines, and the learning goals of the individual lessons do not list vocabulary acquisition. The material provides a strategic approach to develop mathematical vocabulary specifically for English Learners (ELs) through the use of visual and contextual support but does not provide such an approach for general education students. The learning goals for the lesson include the academic mathematical language of the lesson and sometimes address the development of these terms. Most times, however, learning goals or lesson objectives simply utilize the academic mathematical vocabulary while stating the intended outcome of the lesson. The materials provide scaffolding suggestions for ELs, but not for general education students to support the development and use of academic vocabulary in context. The "Program Overview Guide" includes other guidance and scaffolding suggestions for ELs. Each lesson introduces new and review academic vocabulary in the teacher guides. The material provides ample opportunity for students to listen and read academic mathematical vocabulary within and across lessons; however, it has limited opportunities for students to write emphasizing the use of academic mathematical vocabulary. The material sometimes offers teachers suggestions to support the use of academic vocabulary in context in the "Teaching Tips" section of "Lesson Guides." Each topic includes an interactive vocabulary review matching game. The "Student Companions" for topic reviews also include vocabulary review concept mappings. The material does not, however, include tasks that build from students' informal language to the formal language of mathematics by making explicit connections. While there are suggestions throughout lesson guides that support student discourse, there are no routines or any pattern of language acquisition.

Evidence includes but is not limited to:

The material provides a strategic approach to develop mathematical vocabulary specifically for ELs through the use of visual and contextual support. Teacher "Lesson Guides" provide teachers with the mathematical vocabulary terms for the lessons, along with mathematical words previously learned for review. However, they provide no guidance for the teacher on how to strategically incorporate the mathematical vocabulary into the lesson for general education students. The learning goals for the lesson include the academic mathematical language of the lesson and sometimes address the development of these terms. For example, one of the lesson objectives of Lesson 1-1 states "Recognize opposite signs of numbers indicating locations on opposite sides of zero on the number line." The clarification of opposite sides of the zero on the number line adds to the concept development of the vocabulary term opposite signs. Most times, however, learning goals or lesson objectives simply utilize the academic mathematical vocabulary while stating the intended outcome of the lesson. For example, the other lesson objective in 1-1 states "Use positive and negative numbers to represent quantities in real-world contexts." The new academic vocabulary words in the lesson are opposites, integers, whole numbers, and zero. Following the "Lesson Objectives," the teacher guides introduce new and review vocabulary. Lesson "Key Concept" interactive resources introduce the vocabulary to the students. The material provides ample opportunity for students to listen and read academic mathematical vocabulary within and across lessons; however, it provides limited opportunity for students to write while emphasizing the use of academic mathematical vocabulary. The digital resources include videos that sometimes clarify academic vocabulary, speak during vocabulary illustration, or read tasks to students using academic vocabulary. For instance, the Key Concept video of Lesson 9-2 speaks, illustrates, and writes the meaning of equivalent ratios. Lessons identify new vocabulary for use in the lesson. These words are embedded in the context of the math tasks, requiring students to communicate mathematical ideas. The Key Concept introduces lesson vocabulary and incorporates it in most lessons throughout the materials. Additionally, the essential and focus questions sometimes incorporate the content vocabulary. For example, Lesson 5-1 begins with the essential question "What is the power of mathematical expressions?" and ends with the focus question "How do exponents allow you to communicate more precisely to others?" The lesson also includes the terms and definitions for Base, Exponents, and Power. Part 2 of the lesson includes a demonstration and example of each of the terms. Part 3 includes the terms and definitions for Prime Number, Composite Number, and Prime Factorization, then continues with explanations and examples of the terms. The homework included with the lesson poses several questions utilizing the vocabulary taught throughout the lesson. The learning goals do not list vocabulary acquisition, except those found within the ELPS details.

Again, the materials provide scaffolding suggestions for ELs, but not for general education students to support the development and use of academic vocabulary in context. These suggestions are implicit in the ELPS that are included in each lesson. For example, Lesson 13-1 focuses on academic vocabulary, including Triangle Angle-Sum Theorem, and angle, vertex, triangle, and equation. The English Language Proficiency standard 3D guides teachers by

suggesting they speak using grade-level content area vocabulary in context to internalize new English words and build academic language proficiency. Other guidance and scaffolding suggestions for ELs are included in the "Program Overview Guide." The material sometimes offers teachers suggestions to support the use of academic vocabulary in context in the "Teaching Tips" section of Lesson Guides. For example, Lesson 6-2 focuses on the academic vocabulary "commutative properties of addition and multiplication," and a teaching tip guides teachers to emphasize it. Each topic includes an interactive vocabulary review matching game. The Student Companions for topic reviews also include vocabulary review concept mappings, such as the Frayer Model. For example, Topic 2 prompts students to "Identify two challenging vocabulary terms from this topic. Write one vocabulary term in the center oval, and fill in the surrounding boxes with details that will help you better understand them." The workspace includes two Frayer Models for the students to use to complete this task. Though these tasks exist, there is no explicit instruction or guidance for the teacher to set these as classroom routines. The material does not include tasks that build from students' informal language to the formal language of mathematics by making explicit connections. For example, Lesson 10-1 gives extensive guidance for building an understanding of the new vocabulary introduced in the key concepts section. The material scaffolds ELPS guidance between beginning, intermediate, advanced, and advanced high levels. The strategies range from using a sentence frame to explain what the student understood from the key concepts video, completing a Need-Know-Plan graphic organizer, having students compare and analyze similarities in phrases from two separate lesson sections, and having students work out a "Got It" problem and compare answers.

The materials consistently provide vocabulary reviews for every topic and provide topic-related vocabulary with visual representations accessible in the toolbar during lessons; however, there are no formal routines to support language development. The materials build to formal language by introducing topics with informal language at the beginning of concept acquisition. Once ready, the teacher guide introduces formal vocabulary and provides teaching suggestions. For example, Lesson 5-3 begins with the essential question posed to students, "What does a variable allow you to do that you couldn't do before?" Students sort numerical expressions from algebraic expressions before learning about algebraic expressions. Students discuss what makes the new expressions different from the numerical expressions studied previously and whether a numerical value can be found, followed by focusing on academic vocabulary such as algebraic expression, term, variable, and coefficient.

Following the routine of utilizing the "Launch" and "Focus Questions," as described in the Overview Guide, the materials guide the teacher to start lessons by introducing new terms and connecting previously learned terms to the new content. The materials build from students' informal language to the formal language of mathematics by making explicit connections. Student Companion activities typically include questions requiring students to explain their thinking or make connections between learned content and real-world questions. In most cases, these require students to write in complete sentences to convey information. For example, in Lesson 9-1, all three parts of the lesson include Before, During, and After questions

for the teacher to engage with student discourse, and the Student Companion guide includes "Do you UNDERSTAND?" questions, including vocabulary—"What is a ratio," reasoning—"Write at least three different ratios…", and error analysis—"...Is this correct? If not, tell what mistake he makes."

November 2020

Savvas Digits Grade 6

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

Materials provide problems within each lesson for students to apply new and existing mathematical knowledge and skills to solve real-world problems to help students connect mathematical concepts to their everyday life. The program provides opportunities for students to solve real-world problems throughout the lessons. Prerequisite activities embed mathematics lessons in real-world contexts; real-world application problems are also embedded in the "Launch" activities, guided practice activities (the interactive parts of the lesson), and homework problems. Launch activities are open-ended and require students to integrate knowledge and skills to make sense of a context and develop efficient solution strategies. While not all lessons provide data analysis opportunities, some do include opportunities for students to analyze data in a variety of thematically and grade-level appropriate contexts. These opportunities can be found in various components of the lessons. Additionally, there are opportunities embedded throughout the program enabling students to read and interpret graphs and tables with information regarding real-world situations and apply them to current learning. Additionally, the materials contain cross-curricular references within the mathematical word problems. They display real-world data and scenarios using pictures/videos, tables, and graphs. They include the opportunity to research data in the enrichment projects for mathematical purposes.

Evidence includes but is not limited to:

The program provides opportunities for students to solve real-world problems throughout the lessons. "Prerequisite Activities" embed mathematics lessons in real-world contexts; for example, Prerequisite Activity r2 reviews skills necessary for multiplying and dividing fractions

in a lesson involving math in music; Prerequisite Activity r4 reviews skills necessary for doing integer operations in a lesson involving scuba diving; Prerequisite Activity r9 reviews skills necessary for solving ratio problems by embedding skills in a lesson involving audio media playlists on radio stations. In addition to prerequisite activities, real-world application problems are embedded in the launch activities, guided practice activities, the interactive parts of the lesson, and homework problems. Launch activities are open-ended and require students to integrate knowledge and skills to make sense of a context and develop efficient solution strategies. For example, Launch activity 9-4 prompts students to revise sample student work that uses both fractions and decimals to find the sum of rainfall totals in one form and explain their reasoning and revisions. Launch activity 10-2 prompts students to convert days left to summer vacation to "three other ways" and explain the work. Launch activity 14-4 prompts students to reorganize data in a "better way" to help their principal decide on ordering computers for a new computer lab. Materials ask students to explain why they think their way is better than another way. The materials provide opportunities for students to apply their knowledge and skills from multiple units and previous grade levels in problem-solving tasks. For example, the "Do you know HOW?" portion of the lesson provided in the "Student Companion" includes exercises that require students to analyze, justify, explain, and check for reasonableness. In Lesson 3-1, the error analysis questions state "The local animal shelter has 112 dogs and cats. If the shelter has 67 dogs, how many cats are at the shelter? Write and solve the equation that represents the problem." The question requires the students to work through the problem-solving process to completion. The materials require students to integrate knowledge acquired in previous grades and topics to make sense of a problem and solve the problems efficiently and accurately. For example, the "Enrichment Projects" for each topic require accessing and activating prior knowledge. Topic 1 requires students to research planets and moons within the solar system and access prior knowledge from grade 4 when they learned to order and compare whole numbers. In the Topic 16 Enrichment Project, students analyze how banking has changed since the incorporation of technology, which requires students to access concepts related to banking that they covered in grades 4 and 5. The materials contain multi-step problem-solving opportunities for students to integrate knowledge and skills efficiently. For example, when working with real-world scale conversions, students are encouraged to use their knowledge of number lines and simplifying fractions to create scale ratios.

Students are provided data analysis opportunities in a variety of contexts that are thematically and grade-level appropriate. These opportunities can be found in various components of the lessons, such as "Enrichment," Prerequisite, or "Lesson" part activities. For example, Prerequisite Activity r1 provides opportunities for students to collect data on planets in our solar system and make a travel brochure comparing the temperatures and other measurements of the planets. Lesson 1-7 Part 1 provides data in a table of low elevation levels in four states and asks students to determine which elevation is closest to sea level. Prerequisite Activity r3 instructs students to analyze nutritional data as they develop fluency with decimals. Lesson 4-5 Part 1 requires students to analyze data from income and expense statements to determine profits and losses. The materials provide opportunities for students to analyze data from other

content areas and data from the news, provided in grade-appropriate graphs and tables in a way that helps them better understand or draw conclusions about their world. For example, the opening of many units contains data to spark student interest in the topic of the unit. Lesson 1-1 begins its Launch with a table charting temperature at various times throughout the day. Lesson 3-3 cites statistical facts regarding the area of land in the United States. The materials provide opportunities for students to analyze data from real-world contexts in multiple subject areas, such as science, finance, sports, and social studies. The materials present the opportunities in a grade-level appropriate way, using pictures, tables, and graphs. In the Student Companion for Lesson 4-5, students use integer operations to determine the temperature change and calculate profit/loss for a bakery. Pictures, tables, and graphs can frequently be found throughout all topics. Additionally, the enrichment projects contain research tasks that, in most cases, require looking up real-world data online. For example, the Student Companion from Lesson 11-4 covers the process of choosing a basketball player to take the last shot based on a table of player statistics, as well as writing a ratio based on a sports-related pie chart. The materials provide opportunities for students to analyze data in real-world contexts. For example, materials include tables and graphs of data for students to analyze when working with expressions and equations, such as money earned per hour and the relationship of hours spent studying to the score received on a test.

November 2020

Savvas Digits Grade 6

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

Materials are supported by research on how students develop mathematical understandings. The materials partially meet this indicator, as it is clear that a team of authors, researchers, and professors developed this material; however, there are limited citations on the research used to create this material or the ideals on which it is based. The publisher explicitly indicates that some of the components of its material are based on research. The "Program Overview Guide" does have a bibliography specifically for its English Learner (EL) strategies; however, it does not specify the research referenced for each component. Supporting research to meet the needs of English learners is warranted. However, the program does not describe the content and demographics of other Texas-specific demographics. The material does not provide a bibliography for the general structure of the materials and provides little guidance on what specific research-based strategies are being used for lessons and tasks. While the material does not cite publications for the strategies embedded in the program, there is a citation for the published works of the authors of the program, which adds validity to the publisher's suggested approach. The "Authors and Advisors" section of the program overview describes the expertise provided by authors and advisors of the material.

Evidence includes but is not limited to:

The publisher explicitly indicates that the following components of its material are based on research for example problem-based interactive learning, as cited in the Overview Guide;

principles for building EL lessons, as noted in the Overview Guide; and the intervention lessons in the Overview Guide. The Program Overview Guide does have a bibliography specifically for its EL strategies; however, it does not specify the research referenced for each component. The publisher provides a thorough description of their program but provides few research citations for the general framework in the teacher guides or lessons. However, the materials provide significant research citations for the ELPS framework. For example, the Program Overview provides a bibliography for the overview of the EL-directed framework of instruction within the materials, as well as the philosophy of building mathematical understanding with EL students. The Unit A preparation guide for teachers has an example of a research citation found in the materials. In the "Math Background" section, the materials state, "...the use of models in fraction computation is supported by the Institute of Education Sciences in its Practice Guide titled *Developing Effective Fractions Instruction for Kindergarten Through 8th Grade (2010)*." However, there are no other unit preparation guides in grade 6 that provide citations for methods used. The Program Overview guide cites eleven different authors and advisors of the Digits program, many of whom are published authors, professors, and researchers in the fields of K–12 Mathematics. For example, Francis (Skip) Fennell served as NCTM President and was a writer for the NCTM Focal Points. He was also a writer for Principles and Standards for School Mathematics. The program overview uses the term "research shows" on multiple occasions; however, it does not cite the research referenced. For example, "Research shows that introducing new ideas by having students solve problems in which those ideas are embedded develops deeper understanding than other methods," but the text does not cite the research.

While the materials provide guidance for instruction to enrich the educators' understanding of mathematical concepts, they do not cite supporting research, nor do the materials cite research that would support the educators' understanding of the validity of recommended approaches. The materials do not cite or reference research outside of the extensive citation for EL-directed instruction. However, the program overview lists the authors and advisors with a background for each individual. The authors and advisors have published articles and books; this information enriches the educator's understanding of the validity of the publisher's approach. For example, the Program Overview states that one of the authors, Helene Sherman, co-authored the book *Teaching Learners Who Struggle with Mathematics*, published by Merrill. Another author, Art Johnson, has published numerous books, including *Teaching Mathematics to Culturally and Linguistically Diverse Students, Teaching Today's Mathematics in the Middle Grades,* and *Guiding Children's Learning of Mathematics, K–6*. Several other authors and advisors have published work or worked for NCTM. The Program Overview states that approaches are research-based to enrich the educator's understanding of the validity of the curriculum's approach, yet the materials do not make a formal reference to specific research. For example, when referencing problem-based learning in the "Rigor" section of the Program Overview, the 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." In the Math Background section of the "Teacher Guides," each lesson provides information regarding previous lessons, the focus of the current lesson, and what concepts the

lesson builds toward. The TEKS and ELPS are cited; however, there is no research-based guidance cited for the lessons.

While the materials provide guidance for instruction to enrich the educators' understanding of mathematical concepts, they do not cite supporting research, nor do the materials cite research that would support the educators' understanding of the validity of recommended approaches. The Math Background information in both Unit A Teacher Guide and Topic 2 Teacher Guide has examples of cited research: *Developing Effective Fractions Instruction for Kindergarten Through 8th Grade (2010)*. In both instances, the context and demographics of the students in the research were not addressed. The cited research, limited to EL instruction, ranges from 10 to nearly 30 years old and is therefore not based on current research or practices. It should be noted that the material was written in approximately 2013, so some of the research would be considered current at the time of publishing. The program does a thorough job of addressing the instruction for the EL population, which makes up one of the largest sub-populations of public school students in Texas. The Program Overview lists the TEKS and ELPS addressed in each topic. The Program Overview Guide cites references for foundational research regarding ELPS instruction. There are 27 citations of published articles and papers that range from 1981 to as current as 2008. While The Program Overview lists these references, they are not cited within the program materials. There is no research cited for the structure of the entire program.

There is no evidence that a bibliography is present. The only research cited in the material is for EL strategies; that research is current and relevant to its targeted subpopulation in developing mathematical skills. According to the Texas Education Agency Division of Research and Analysis, English learners account for approximately 19% of all Texas students as of 2019; thus, supporting research to meet the needs of this demographic is warranted. However, the program does not describe the content and demographics of other Texas-specific demographics. This bibliography can be found within the ELPS section of the Overview Guide. Additionally, there are references to books published by the authors of the materials, yet no formal bibliography for teaching strategies of the general curriculum.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 2/4

The materials present a partial model but do not present a complete model, as outlined in the TEKS. The material does not teach a specific problem-solving model; however, it does include prompts for students to apply problem-solving strategies through multi-step problems that support the development and practice of problem-solving. These multi-step problems occur throughout the lesson components, such as in the "Pulling It All Together" sections and the "Enrichment Projects." The material includes problem-solving opportunities that guide students to use models, find solutions, justify their responses, and check for the reasonableness of their solution. The "Student Companion Guide" sometimes provides prompts for students to reflect on their approach to problem-solving. "Teacher Guides" for lessons provide guidance for teachers to support student reflection of an approach to problem-solving through questioning. The materials also provide problem-solving models/organizers in the curriculum, such as the "Know-Need-Plan" or "Think -Write Organizer." While the toolbar allows students to access blank organizers, they are not prevalent throughout the materials as a reminder directly to students to use during problem solving. Additionally, the Teacher Guides provide many guiding and reflecting questions on the solutions and approaches that students take when solving problems, yet the material lacks prompts provided directly to students on their approach or any formal reflection. The problem-solving model does not provide steps for reflection on the student's approach to solving problems nor the solution itself. There are opportunities incorporated throughout the materials to promote the discussion and discourse of problem-solving, and there are guiding topics to support teachers in asking the appropriate questions to steer the discussion in the direction of what good problem-solvers should think. However, the lack of a specific or complete model keeps this indicator from being Meets.

Evidence includes but is not limited to:

According to the "Program Overview Guide," the program builds to the TEKS, which "requires a synthesis of both the mathematical process standards and the mathematical content standards…the process standards identify the attributes of mathematical thinking that teachers of all grades need to reinforce." There are multiple opportunities for students to practice problem-solving. The last lesson within each topic throughout the program is an "Additional Problem Solving Practice," tying all the skills from the topic together. Additionally, the guiding questions in the teacher guides are conducive to developing problem-solving skills. The materials introduce the Need-Know-Plan problem-solving organizer early in the curriculum and include a solution diagram explaining how to use the organizer, as well as providing a wide array of opportunities to practice and apply the problem-solving organizer. It provides a blank organizer, and the teacher guide provides a suggestion to help guide students. Additionally, the solution box provides a sample completed organizer, along with a step-by-step solution process. The toolbar provides "Grids and Organizers" to assist students in problem solving. The blank organizers/models include Know-Need-Plan Model, Think-Write Model, "Words-to-Expression/Equation/Inequality," and several types of Venn diagrams. The teacher guide gives instructions on how to apply them to a specific problem. The problem-solving organizer provides opportunities for students to practice and the model is primarily grounded in the problem-solving process standards provided in the TEKS, although it lacks reflection on the justification of the solution and evaluation of the process and a check for reasonableness. For example, the Need-Know-Plan model requires analyzing the information given and formulating a plan to solve for what is needed to determine the solution. However, the model stops at the formulation of the plan. While the material includes a graphic organizer of a problem-solving model, it does not introduce a specific model to transfer across problem types. The graphic organizer is housed in the Grids and Organizers resource area and is presented in specific lessons. Though problems throughout the material provide opportunities for students to apply the problem-solving processes as outlined in the TEKS, the model itself does not align with the standard in its totality. The graphic organizer only consists of Know, Need, Plan sections. Even though a Universal Problem Solving Model is not explicitly introduced or supported throughout the curriculum, students are given opportunities within each lesson to Understand the problem, Make a plan to solve the problem, Solve the problem, and Communicate their solution. For example, the teacher guide for each lesson provides scripted questions for understanding to be stated Before, During, and After solving the problem. The "Launch" section of Lesson 5-5 provides guiding questions for the teacher to state before, during, and after the problem. Teachers then encourage students to share solutions, make predictions on possible correct and incorrect solutions, and then verify their predictions or justify and evaluate the reasonableness of the solution.

The material does not teach a specific problem-solving model across concepts; however, it does include prompts for students to apply problem-solving strategies. There are several opportunities throughout the program prompting and supporting the teacher and student to apply a problem-solving process, though the materials do not contain support for how to utilize

a specific problem-solving model. For example, the materials include “Additional Problem Solving” lessons after a topic. For example, the student companion guides have “Do you know HOW?” and “Do you understand?” questions. These questions are generally written in a way to address topics found in the problem-solving process. Several times, it states “Explain” or “Why does this process work?” While there are student prompts within the material to apply the problem-solving model, they are not provided directly to students consistently across all lessons or topics. When looking through the teacher guides, there are frequent suggestions to use the Know-Need-Plan organizer across the topics, primarily with ELPS and struggling learners.

The materials include guidance on ways to prompt student reflection about their approach to problem-solving. For example, the student companion guide’s inclusion of the Do you know HOW? and Do you understand? questions exemplifies how to use a problem-solving process. They are given opportunities to correct incorrect thinking, explain a process they used, justify solutions, identify problems, and select tools to help their solution process. While the materials provide opportunities for reflection on topics themselves, the materials lack prompts directly provided to the student for reflection on their problem-solving approaches. It should be noted that there are prompts given to the teacher that are directed toward student reflection of problem solving for all lessons.

The materials provide teacher support for guiding students through problem-solving by giving teachers instructional cues within the “Solution Notes” of the Teacher Guide for each lesson. The materials contain prompts within the teacher guide to support student reflection about their approach to problem-solving. For example, the teacher guide provides guiding questions for understanding for teachers to use before, during, and after approaching different phases of the lesson. These questions are exploratory in nature. Lesson 1-7 lists the question “What does this mean?” before solving the problem in Part 2, requiring students to understand and analyze given information. Other questions within the lesson include “How can looking at one coordinate at a time help you avoid graphing the points?”, encouraging students to utilize the tools, and “Why would you want to use absolute value to solve this part of the problem?”, requiring students to reflect on their process. The materials provide a significant amount of reflection prompts throughout all teacher guides. Each lesson includes problem-solving, and the Teacher Guides include reflection questions before, during, and after problem-solving. Teacher Guides for lessons provide guidance for teachers to support student reflection of an approach to problem-solving through questioning, such as in Lesson 3-4 that includes the following questions: “What steps would you take to solve this problem?”, “ Which parts of the problem use multiplication? Which parts use division?”, and finally, “How could you use Distributive Property to solve this problem?” Another example from Lesson 3-4 asks students to calculate the mass of a coin when given the difference between that coin and a larger coin. The Teacher Guide provides discussion prompts related to evaluating their solution with questions such as, “Which coin has a greater diameter? Does your answer confirm that comparison?” and asking students for other ways they could check their solution.

November 2020

Savvas Digits Grade 6

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.

Meets 4/4

The materials provide opportunities for students to select appropriate tools for the task, concept development, and grade. The materials provide students with on-demand virtual tools that are appropriate for the grade-level. The materials provide teachers with support in working with the tools. Materials teach students how to use the tools and give them opportunities to select the appropriate tool for the task. This digital program utilizes technology throughout and houses a bank of grade-appropriate interactive tools readily accessible to students during any lesson. The technology tools guide students to solve tasks and understand concepts through videos, simulations, and written directions. The “Program Overview Guide” presents information about the math tools, informing teachers how they support various aspects of learning. The interactive tools resource center includes detailed guidance on how to use each tool. Teacher guides that accompany each lesson explain which tools are appropriate and efficient for a task. The materials provide online manipulatives, referred to as the “Math Tools,” that are accessible to teachers and students through all modules. When a tool is appropriate for a specific lesson, the lesson will walk students through the use of the tool, primarily through a demonstrative video, and the “Teacher Guide” provides an expansion on how to use the tool and its appropriateness. Materials provide students with opportunities to select tools when problem solving, through the completion of homework and review tasks. Teacher Guides provide insight to teachers on tool use, often with specific application details for a problem and suggestions on when the tools may be appropriate for struggling learners. The material does lack hands-on tools and manipulatives and instead has a primary focus on digital tools.

Evidence includes but is not limited to:

The material houses a bank of grade-appropriate interactive tools readily accessible to students during any lesson. Each tool includes an "Interactive Help Guide" that provides detailed information on how to use the tool. The guide explains how the program uses tools that are "virtual manipulatives that enable users to interact with, develop, and model math concepts in real-time. The tools support teachers in constructing and teaching math concepts visually. The tools also support students in exploring variations of a given math concept and deepening their understanding of the concept." The materials provide opportunities for students to select the appropriate virtual tool to use to solve a task. For example, in Unit 1, the sections of the lesson progress through using integer chips and number lines to represent adding rational numbers. Students can then select the type of tool to use when solving homework problems. Another example in Lesson 7-2, Part 2 prompts students to use the Pan Balance to model, compare, and manipulate expressions, equations, and inequalities using natural number values. The materials provide students opportunities to learn to use representations from the grade-level TEKS to solve tasks and enhance student understanding of concepts by exploring mathematical ideas and making and testing conjectures. For example, Lesson 7-2 introduces concepts using a pan balance and algebra tiles as virtual manipulatives. The materials provide students with opportunities to select grade-appropriate tools for solving tasks. For example, the resource provides all students access to "Math Tools," which contains number lines, place-value blocks, area models, fraction and percent models, integer chips, algebra tiles, pan balance, coordinate grapher, 2-D shapes and 3-D figures, data and graphs, probability tools such as spinners and dice, and a calculator. The materials provide students with opportunities to learn how to use grade-appropriate online manipulatives and algorithms for solving tasks and enhancing conceptual understanding. However, as a digital resource, the materials lack hands-on manipulatives and the use of real objects for concept development.

The program is digital; therefore, most of its implementation involves the use of technology. The technology tools guide students to solve tasks and understand concepts through videos, simulations, and written directions. For example, Lesson 4-1 includes an introductory video that illustrates the concept of multiplying integers by modeling on a number line. The next part of the lesson then prompts students to complete a number line model to find the product of $4(-7)$, all while providing them with a guided instruction video. Because the program is digital, it provides ample opportunities for students to select grade-appropriate technology using its Math Tools Resource Center. Another example, in Part 1 of Lesson 7-3, demonstrates using the pan balance to solve a one-step equation, and the narration provides insight for conceptual understanding. Following the video, materials give students similar problems to solve with the pan balance readily accessible in the toolbar. The materials provide students with opportunities to learn how to use grade-appropriate technology for solving tasks provided in the toolbar throughout all modules. The online manipulatives enhance conceptual understanding as well. The materials provide this toolbar throughout all of the publisher's lessons. The materials provide opportunities for students to choose grade-level appropriate tools for solving

problems, including technology tools. Lesson 1-6 requires students to graph points and determine their quadrant based on their location. The lessons give students the option to use the coordinate grapher tool to assist in finding the position on the coordinate. Also, within each lesson, students can take what they have learned in the lesson, including mathematical tools, and select tools to apply when completing their homework and review tasks. For example, each lesson contains a homework assignment, and students can select the appropriate on-demand tool to work through the problem independently. However, the materials provide some limits to opportunities for students to select grade-appropriate technology tools for solving tasks. For example, the Math Tools provides a basic function calculator, but the specificity listed in the TEKS states the necessity of implementing graphing technology.

The materials provide guidance for suggested tools with explanations of how to use and discuss the tools with students. The “Solution Notes” section of the Teacher Guide provides teachers with guidance on how to use the virtual tool. Lessons that include the use of the virtual tool also include a video modeling the use of the virtual tool. The materials explain how students will use the virtual tools, as well as give information regarding the use of virtual tools from previous grades. For example, the “Math Background” section of the Teacher Guide gives teachers detailed information regarding the use of any virtual tools from grade 5, and introduces the tools for grade 6. For instance, Lesson 12-3 suggests the use of the 2D Geometry Tool to model the parallelogram to decompose the shape and rearrange the parts to form a rectangle. The guide then states that the model can calculate the areas of the rectangle and parallelogram so that students can confirm the areas are equal. The Teacher Guides provide specific suggestions within lessons, detailing which tool students could use to complete a task and how they can use the tool. For example, the Teacher Guide for Lesson 4-1 suggests, “Let students work in the Addition mode of the Integer Chips tool to add chips and make zero pairs. As they use the tool to find each score, help them make generalizations about adding integers.” Additionally, it provides insight for clarification of tool selection for students, as the Teacher Guide states that some students may want to use a number line and suggests that the teacher point out that problems with large numbers can be cumbersome when using number lines or integer chips, leading to the efficiency of algorithms.

November 2020

Savvas Digits Grade 6

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 provide opportunities for students to select appropriate strategies for the work, concept development, and grade, and guides teachers through introducing and utilizing strategies. The material teaches multiple strategies for many of the topics and provides frequent opportunities for students to choose from strategies when solving problems throughout each lesson. Materials give teachers guidance to support students in choosing a strategy and building on their knowledge to move toward more efficient strategies throughout the units. The “Teacher Guides” provide prompts aimed at analyzing strategies, followed by sample answers regarding possible approaches students may have chosen and how to respond to those approaches through class discussion. The online curriculum presents students with opportunities to demonstrate their understanding of the concepts using varying problem-solving strategies.

Evidence includes but is not limited to:

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. The materials cue students to select techniques when solving tasks or problems, as well as support students in selecting appropriate techniques when solving tasks through prompts provided by the teacher. For example, Lesson 13-3 teaches students to determine if three side lengths form a triangle. Per the “Author’s Intent” section of the “Launch,” the systematic way of solving can vary in two different ways. For those students who understand the concept, they may progress

into finding a more efficient way of solving the problem and check their method using algebra. For example, in Lesson 8-4, students learn different ways to display linear relationships. The Teacher Guide provides prompts for students "Before," "During," and "After" a task or problem. On a couple of occasions, the During prompt asks students which method or model best represents the information, with detailed sample answers for those who choose equations or tables. Lessons consistently provide this type of guidance across all lessons. The materials include prompts that require students to select a technique for solving a task. For example, Lesson 1-1 Launch asks, "If the trend continues, what might the temperature be at 8 P.M.?" This prompts students to utilize number sense and relations, form generalizations to make a prediction, and estimate the final solution. The lesson continues, with Parts 1 and 2 requiring students to utilize number sense and understand generalizations of numbers to find the solutions. For example, Lesson 6-1 gives students the option to use different combinations of multiplication and division as well as using tactile manipulatives to solve the unit rate problem. The solutions are then discussed to find the most practical technique. The materials support students in selecting techniques appropriate for the grade level and task. For example, the materials provide questioning prompts for the instructor to assist students in choosing a technique appropriate for finding their solution. In Lesson 1-3, the guided questions for Part 1 reference the use of number lines to help with setting up the solution process. The materials provide teachers with scripted prompts that provide support for student technique selection. For example, in Lesson 6-1, the use of all the combinations is acceptable, but the lesson guides students to the Unit Rate approach in this lesson.

The Teacher Guides (and "Solution Notes") contain examples of support for teachers in helping students to understand appropriate strategies. Lesson 5-1 has an example which supports teachers by providing the following information: "Students could have gotten the correct solution without knowing how to evaluate $4(1200 \div 20)$. Show that you can compare the two expressions instead of evaluating them, which gives students a valuable and efficient skill." The guides also support teachers by providing questioning techniques to help students understand appropriate strategies for tasks and guide students toward increasingly efficient strategies. For example, in Lesson 5-6, the guide prompts teachers to add the following questions followed by sample responses: "How is a bar diagram different from a bar graph? A bar diagram has one bar and models a word expression or word problem. A bar graph shows and compares data and usually shows several bars. In which model is the total usually a variable?" A subtraction model is represented. "Can an addition or subtraction bar diagram have more than two parts? How would that change your expression?" Sample answer: "Yes; for example, if the bar had three parts, the expression would have three terms."

The teacher guides regularly provide navigation through appropriate strategies for solving a task or problem. For example, within the Teacher Guides, the "Math Background" section details the progression of the concepts, not only from previous to current to future grade levels but also within the lesson or topic itself, often with a mention of how students move toward more efficient strategies as conceptual knowledge grows. The Teacher Guides provide the teacher with prompts for students to consider their approaches and develop more efficient

strategies when solving tasks and problems, particularly in the After questioning for each task. For example, in Lesson 4-1, students work with integer operations, and the Solution Notes note that, while students may prefer to use number lines or integer chips, the teacher should point out that these methodologies could become cumbersome when working with larger numbers and encourage the progression of using the more efficient method of algorithms.

The materials support students in learning multiple strategies to solve problems of the same type and provide opportunities to choose from multiple strategies when problem solving. For example, Lesson 12-7 challenges students to calculate the area of a polygon. The Solution Notes state that students can solve this problem using several different decompositions and direct the teacher to point out the most efficient method if it isn't mentioned. The same notes provide an additional method that advises struggling students to find the area of one grid square and multiply it by the number of squares. For example, the Teacher Guide gives instructors information on how to teach students to use a pan balance, algebra tiles, and properties of equality for solving equations. Students are given virtual manipulatives such as a pan balance and algebra tiles and encouraged by the supports in the Teacher Guide to select the appropriate tool to solve equations within the lesson.

November 2020

Savvas Digits Grade 6

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 support teachers in building students' self-efficacy during concept attainment through the use of guiding questions before, during, and after each part of the lessons. The materials are sequentially organized to allow students to gradually build knowledge while guiding students through productive struggle when problem-solving. Each "Teacher Guide" contains "Solution Notes" that offer additional guidance, ideas, and specific error correction to realign students' understanding and guide them toward strategy building. The tasks provide opportunities for multiple pathways of problem solving, along with possible pathways provided in the Teachers Guides. The materials provide support for teachers to ensure all students are actively learning by providing explicit directives in the "Fostering Student Engagement" sections of the lesson Teacher Guides. The materials use real-life context when introducing topics and presenting problems, thereby making it more meaningful and engaging for students. The "Launch" sections provide a center point in which students may see themselves as mathematical thinkers at the start of each lesson, as introduction videos do include a breadth of diversity. The scripted materials for the teacher provide guided instruction on using multiple strategies. The materials provide multiple opportunities for students to experience mathematics in real-world problems to connect their learning to applicable fields of study.

Evidence includes but is not limited to:

The materials provide structures to support the development of a mathematical community where students are active, rather than passive, learners of mathematics, support the development of confident problem solvers, and provide opportunities for all students to see

themselves as doers and thinkers of mathematics. For example, the materials include an "Enrichment Project" at the beginning of each Topic. The materials present these projects as a situation or problem to investigate, with context aligning to prerequisite skills, and allow for flexibility in delivery. Students can work collaboratively to problem solve. The Enrichment Projects are generally based on real-world applications with topics of interest for the age level. The materials use real-life context when introducing topics and presenting problems, thereby making it more meaningful and engaging for students because they can draw from everyday life experiences and are more invested in the topics and problems. For example, the majority of the topic opener and Launch sections provide a center point where students may see themselves as mathematical thinkers, with introduction videos that include a diverse cast. Each lesson contains videos where individuals explain upcoming topics and concepts or offer guidance when solving a problem. These individuals represent *all* Texas demographics. The materials support student self-efficacy by providing writing prompts for students to check their understanding of the material. For example, the "Student Companion" section of each lesson includes a "How do you KNOW/Do you Understand" section where students can reflect on their understanding of the content.

The materials provide tasks that allow students to choose from multiple pathways to problem solve by choosing the methods and tools they have learned. The scripted materials for the teacher provide guided instruction on using multiple strategies. For example, the Launch section of each lesson provides students with a real-world problem in which they must come up with a solution to the problem. The lesson presents the problem to students before the lesson, which allows students a divergent approach to problem-solving. The Teacher Guide for the Launch section provides a scripted dialog for the teacher to provide "Before," "During," and "After" the problem to allow students to see and work with multiple pathways to a solution. The materials provide multiple opportunities for students to experience mathematics in real-world problems to connect their learning to applicable fields of study. For example, each lesson includes 2–3 sets of problems. The first set introduces the problem in simplistic terms, while the second or third set applies the content to a real-world problem. The Teacher Guides, often in the Solution Notes section, provide possible pathways for students and discussion prompts that lead to class discussion of various approaches taken by classmates. For example, Lesson 11-4 has two sections of solution notes that explain different methods of solving the problems. In Part 1, the solution notes advise the teacher to encourage students to choose the problem-solving method they are most comfortable with, followed by discussing what method students used and why. Next, in Part 2, the solution notes explain that there are several methods students can take to solve the problem and to accept "any method that shows students can apply reasoning to problems involving ratios, as this prepares them to work with proportionality in future courses." The materials provide opportunities for students to solve problems in multiple ways, utilizing a variety of tools and strategies, and develop efficient ways, not just a set of memorizable procedures. For example, each topic includes an Enrichment Project. Students apply their current thinking and any previously learned mathematical techniques to solve the tasks. Students can work independently or cooperatively to develop strategies to work toward the solution. Key strategies for the development of the mathematics

within the chapter can be posted in the room for reference. The materials also provide norms for engaging in mathematics as an act of creativity and experimentation.

The teacher guides that accompany each topic and lesson guide teachers on facilitating the sharing of students' approaches to problem-solving. The materials include questioning techniques that provide scripted questions for the teachers and potential student responses that indicate students' understanding of the information or concept. For example, in Lesson 2-3, the teacher guide instructs teachers to ask students, "How do you divide two unit fractions?" The guide also provides the following sample student response: "Multiply the dividend by the reciprocal of the divisor." The materials support teachers in setting up tasks that promote divergent thinking when appropriate, in sections such as Fostering Student Engagement, "Teaching Tips for the Key Concept," Solution Notes, and "Connect Your Learning." Lesson 3-4 provides the teacher the following support in solution notes: "The purpose of this activity is to present students with a straightforward problem involving multiplication and addition with decimals. How students organize the information in order to find the total number of miles may vary, and you can discuss how addition and multiplication each play a part in solving this problem." Solution Notes also provide support for teachers in sequencing the discussion of student strategies. The materials provide directions to teachers on how to guide the discussion of student solution strategies to further student learning of mathematics by carefully sequencing student strategies to allow for student connections between the strategies. For example, the Teacher Guides provide suggested questions for Before, During, and After instruction; the anticipated students' misconceptions; and how to address them. Additionally, Teacher Guides also provide suggested solution strategies to guide teacher facilitation of student problem solving.

November 2020

Savvas Digits Grade 6

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.

Meets 4/4

The materials prompt students to effectively communicate mathematical ideas, reasoning, and their implications using multiple representations. The materials provide students with opportunities to communicate mathematical ideas throughout the lessons, including presenting findings from "Enrichment Projects" and in lesson parts on "Student Companion" guides. The Enrichment Projects give students various modes to present their work, as well as directions to communicate their ideas, process, and findings to family and friends. The materials have frequent opportunities and prompts to work with classmates. The materials contain tasks that can be solved using a variety of mathematical representations and provide opportunities for students to use representations to organize and show their thinking in words, symbols, tables, graphs, and other illustrative diagrams. The materials provide guidance for the teacher in the Teacher Guides that accompany each lesson. The Teacher Guides contain tips and strategies on how to elicit students' communication of mathematical ideas, prompt students to use multiple representations as they communicate their reasoning, and support the development of students' mathematical vocabulary. Most of the guidance supports include questions requiring students to communicate their responses in oral or written form. Other prompts guide teachers to have students communicate their ideas in various other representations.

Evidence includes but is not limited to:

The materials provide students with opportunities to communicate mathematical ideas throughout the lessons, including presenting findings from enrichment activities. For example, Lesson 1-2 Part 2 directs students to discuss the following with a classmate: "Choose a region of the diagram. Read the name of the region out loud. State three examples of numbers that

belong in that region." The materials contain tasks for the student to solve using a variety of mathematical representations, such as Lesson 3-3 Launch, which asks students to use at least one decimal and at least one fraction to represent the quantity shown in four new and different ways and then tell whether one of these representations is more useful than the others and why. Additionally, Lesson 4-5, Part 2, asks students to solve problems using the addition and subtraction of integers or using a number line. When appropriate, the materials contain tasks that ask students to use representations to organize and show their thinking in words, symbols, tables, graphs, or other illustrative diagrams. For example, Lesson 6-1 activity asks students to write an expression to solve the problem and explain the results.

The materials include tasks that provide students with opportunities to share and discuss mathematical ideas and representations using visual, physical, contextual, verbal, and symbolic representations. For example, in the Topic 5 Enrichment Project, the project "Do-It-Yourself Podcast" requires students to write a plan for a music podcast. Students research popular podcasts and analyze how they are put together. They use variables to represent situations, define the variables, create tables to organize calculations, and write a report on their findings. Upon completion of the project, they must review and make changes as necessary. The materials contain tasks that require students to organize their mathematical thinking, followed by communicating their process and solution/final product to others. For example, the Enrichment Projects of each topic invite students to showcase their knowledge through various mediums. Some mediums consist of creating a recipe card and including a chart to display nutritional information. The materials provide opportunities for students to solve and communicate their mathematical ideas using pictorial models, physical representations, verbal descriptions, and symbols. For example, Part 1 of Lesson 7-7 gives students a verbal description and asks them to draw a model of the scenario and write an associated equation, followed by solving the equation.

The materials provide teacher guidance in the Teacher Guides that accompany each lesson. The Teacher Guides include tips and strategies on how to elicit students' communication of mathematical ideas, prompt students to use multiple representations as they communicate their reasoning, and support the development of students' mathematical vocabulary. Most of the guidance supports include questions requiring students to communicate their responses in oral or written form. Other prompts guide teachers to have students communicate their ideas in various other representations. For example, the Lesson 6-2 teacher guide prompts teachers to "call on students to drag tiles to form three different algebraic expressions on the whiteboard. Students can use multiple copies of each tile as needed." Lesson 7-2 prompts teachers to ask students, "What does it mean for two equations to be equivalent?" and Lesson 8-2 prompts teachers to "use the Intro to show students how to organize information about multiple quantities in a table. On Screen 2, call on students to drag circle and square shapes to form Figure 4."

The Teacher Guides include focus questions, guiding questions, and embedded mathematical vocabulary. In Lesson 5-1, the focus question asks, "How do exponents allow you to

communicate more precisely to others?"—bringing attention to the need to efficiently and effectively communicate mathematically. The before/during/after questions utilized throughout the lesson encourage the use of manipulatives, properties of operations, and expressions to represent equivalent expressions. The "Key Concepts" component of the lesson introduces the mathematical vocabulary for the lessons, and these terms are reiterated through the questions. The materials provide teachers with a vast number of prompts that promote mathematical communication, both orally and in writing. For example, all lesson Teacher Guides include discussion prompts for each lesson part before, during, and after tasks/problems. These discussion prompts also encourage students to record mathematical thoughts and processes on their student companion sheets or digitally. The materials supply teachers with guiding prompts that support students by strengthening students' understanding when working with multiple task-appropriate representations. For example, the Teacher Guide for Lesson 14-6 thoroughly provides teachers with guiding questions for students to consider when using various forms of data display. In particular, the Launch "introduces the idea that the choice of data display or interpretation of data from a display can lead to poor decisions." Students learn to construct a data display and interpret the data to make better decisions. The materials include prompts for teachers to support student reasoning with multiple representations. For example, each lesson provides teachers with scripted, open-ended questions for guiding student understanding located within the "Preparation Notes" of the Teacher Guide. The materials also support student vocabulary building by having students write about the vocabulary words at the end of each topic. For example, the Student Companion's "Topic Review" section has a place for students to expand on challenging vocabulary words by writing the word, the definition, informal explanation/characteristics, an example, and a nonexample. The materials provide scripted teacher supports explaining and discussing vocabulary.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 2/4

The materials provide opportunities to discuss mathematical ideas to develop and strengthen content knowledge and skills, but they do not include guidance for the teacher in structuring and facilitating discussions. The materials intentionally provide opportunities for students to engage in mathematical discussions in a variety of group settings, including with peers (in lesson parts); with the teacher (prompted by the teacher before, during, and after instruction with guided questioning), and outside of the classroom (found in many of the "Topic Enrichment Projects"). The materials include opportunities for discussion throughout the lessons, beginning in prerequisite and launch activities, in the middle in lesson parts in the student companion guides, and at the end in topic reviews to support concept and skill development. All lesson parts include prompts to discuss before, during, or after, and, in some cases, all three. The "Student Companion" guides used by students as they work through lessons often instruct students to discuss a problem with a partner and give prompts or details on what should be discussed and sometimes how. The materials lack guidance for teachers on structuring discussions.

Evidence includes but is not limited to:

The materials intentionally provide opportunities for students to engage in mathematical discussions in a variety of group settings, including with peers in lesson parts. For example, Lesson 4-1, Part 2, prompts students to discuss the following with a classmate: "Circle the key words: Inverse, equivalent, take turns reading one of the circled words, and explain what the word means." It also prompts them to discuss with the teacher before, during, and after

instruction with guided questioning. For example, in Lesson 10-2, the teacher guide prompts teachers to ask students before the lesson, “Why would you want to convert units to meters?” They can discuss outside of the classroom, as found in many of the Topic Enrichment Projects. For example, Topic 11 Enrichment Project for Ratio Reasoning prompts students to evaluate their work based on the project checklist and then review it with a friend or family member. The materials use “Prerequisites Assessments” at the start of the unit to determine how to use student groups and differentiation with each student. Small group instruction is recommended for struggling students during “Prerequisites Lessons” and “Intervention Lessons.” The “Program Overview Guide” recommends the use of small-group interactions and peer questioning with whole class, heterogeneous groups, or pairs while students engage in real-life projects. Additionally, it recommends completing the “Make Connections” at the end of each lesson as a “Think-Pair-Share” exercise or in a small group.

The materials include opportunities for discussion throughout the lessons to support concept and skill development. For example, at the beginning of each lesson, students participate in thematically-focused prerequisite lessons. Some prerequisite lessons allow students opportunities to discuss current mathematical concepts. For example, Prerequisite Lesson 5 provides an opportunity for students to discuss the ranking of contestants—students can even role-play this activity! In the middle of the lessons, the Student Companion guides often provide prompts for students to discuss their problem-solving processes and solutions with classmates. For example, Lesson 5-2, Part 1, prompts students to “Discuss the following with a classmate: Describe the steps you took to answer this problem. Did you both solve the problem the same way? If not, was one method more efficient than the other? If your answers were not the same, identify the error in reasoning that led to the incorrect answer.” “Topic Reviews” finish each topic and provide students opportunities to discuss what they have learned from that topic. For example, at the end of Topic 5 Variables and Expressions, the materials ask the students, “What is the power of mathematical expressions?” The materials include a video that provides students with a few examples and asks them if they can think of more examples.

The materials intentionally support discussion throughout all phases of content and skill development. For example, throughout the lesson cycle, there are numerous opportunities for the students to engage in discussion. Each lesson is structured with a “Focus Question,” “Launch,” “Key Concept,” 2–3 Parts, and a “Close and Check,” which includes “Do you know HOW?” and “Do you UNDERSTAND?” portions. At the beginning of each lesson, the lesson poses the Focus Question, and throughout the Launch, Key Concepts, and all Parts, notes in the Teacher Guide include questions and conversation starters for before, during, and after the phase of the lesson. During the Close and Check, students review and discuss the Focus Question before they work with a partner or group to address the Close and Check questions. The Close and Check questions are generally argumentative discussions; for example, the Lesson 5-2 Do You UNDERSTAND? includes one question of error analysis and another explaining a symbol used in a previous question.

While the materials provide “Teacher Guides” for each lesson with a variety of open-ended questions for discussions, the materials lack guidance for teachers on structuring discussions. The materials lack guidance on how to structure discussion, and, while the materials provide discussion prompts, they do not provide the methodology of carrying out the prompts or responses for the class as a whole. The materials do provide structure for specified designations in the ELPS groups. For example, in Lesson 4-5, the ELPS instructions are broken out between beginning, intermediate, advanced, and advanced high groups. The guidance states that advanced students should pair off and explain to each other how to find a missing number and write the associated equation. Following this, each pair works together to complete a pyramid puzzle involving integer operations.

November 2020

Savvas Digits Grade 6

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 grade-level appropriate mathematical ideas.

Meets 4/4

The materials provide opportunities for students to justify mathematical ideas using multiple representations and precise mathematical language. The materials provide opportunities for students to use various mathematical representations, such as symbols, verbal descriptions, and graphs, to justify their mathematical thinking. The materials include several instances where students can justify their answers in a variety of ways, based on their preference. Additionally, the materials provide prompts for teachers to guide students into building on their understanding by questioning original responses from the student or differences in mathematical justifications between classmates. The materials provide opportunities for students to justify mathematical ideas using whole group and small group discussions. Materials guide teachers in supporting students in these discussions in the form of scripted questions with possible answers, as well as background information. Students can also justify mathematical ideas using “Enrichment Projects” and presentations of their ideas.

Evidence includes but is not limited to:

The materials provide tasks for students to justify mathematical ideas and present those arguments to the class. For example, each lesson includes “Do you know HOW?” and “Do you UNDERSTAND?” sections at the lesson conclusion, which include opportunities for students to construct their arguments and mathematical ideas. Lesson 10-1 includes an “Error Analysis” question, with a given situation and solution, and the student needs to identify and explain the mistake made. The “Teacher Guide” recommends completing this section as a partner or small group activity, so the students communicate verbally as well.

The materials provide students with opportunities to justify their mathematical statements using various representations such as verbal descriptions, symbolic forms, models, and graphs. For example, the "Student Companion" presents opportunities to verbally share mathematical ideas with classmates in addition to walking classmates through written justifications. Lesson 6-2 asks students to respond to a question involving the Commutative Property and then share explanations with a classmate, followed up by a discussion of any unclear parts in each other's justifications. Another example, the "Launch" of 14-6, allows students to choose from various data displays such as graphs to justify a decision along with verbal support for the justification of the best gigabyte storage. The lesson encourages the teacher to let students debate on whether they agree with the Company's conclusion and justify their reasoning during this process.

The materials provide routine prompts throughout lesson parts to guide students in constructing their arguments and self-analyzing their approaches, so they can compare to alternate approaches taken by classmates. For example, several teacher guides across the topics suggest the use of a "Think-Write" organizer. In Lesson 3-3, the Teacher Guide suggests the use of a Think-Write organizer to justify each step of converting a decimal to a fraction in simplest form. In this scenario, the guide suggests that the teacher pull the organizer up on the whiteboard and have students take turns writing the reasoning for a step, with an emphasis on "writing the decimal in word form, using the words to write a fraction, and simplifying that fraction." For example, the materials list discussion questions that build on current knowledge and understanding during a task, using suggested follow-up inquiries made by the teacher. Additionally, in Lesson 11-4, the teacher asks, "Why do you think it's important to study percents?" and "How do percents help you solve problems more efficiently?"

Additionally, the materials also provide routines within the lesson structure in the teacher's guiding questions to facilitate discussions within the class. For example, the Teacher Guide for each lesson provides an "Essential Question Connection" section that gives teachers background knowledge of the content connections, as well as discussion questions to deepen student understanding of the content. The questions provided when finding the usefulness of working with properties include "Why do you need the Commutative Properties?" and "If you have three or more terms, how is using the Commutative Property like using grouping symbols?"

November 2020

Savvas Digits Grade 6

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 guidance for teachers and students to monitor progress; however, they do not include formal methods and guidance for students to track their own progress and growth, nor is it documented that all content and process skills are measured. Students receive formal and informal assessments throughout the lessons and topics and can showcase their understanding in a variety of ways, particularly in the "Enrichment Projects." The materials include formal assessments, such as "Prerequisite Assessments," topic, and unit tests; and informal assessments, such as "Got It?," "Do You Know HOW?" and "Do You UNDERSTAND?" problems and developmentally-appropriate diagnostic tools. The tools are designed to allow students to demonstrate understanding in a variety of settings, including whole group, small group, and peer-to-peer, and in a variety of ways, including through discussions, pencil and paper, computer-based, and performance-based. The materials support the administration of each diagnostic tool, providing recommendations for the administration. The materials do not, however, include formal methods and guidance for all students to track their own progress and growth. The diagnostic tools are designed to measure all content and process skills as outlined in the grade-level TEKS; however, individual assessment items do not have the associated standard attached to them to determine if, indeed, all standards are assessed.

Evidence includes but is not limited to:

The materials include formal and informal developmentally-appropriate diagnostic tools. Each unit includes a Prerequisite Assessment designed to assign students to leveled learning groups. The end of each topic has a test designed as a summative tool, assessing mastery toward the related lessons within the topic. Additionally, the materials include informal assessments, such as Got It? Problems, throughout each lesson. For example, Lesson 1-2 asks students to classify a mixed number and associate it with its respective region in a Venn diagram. Additionally, Do You Know HOW? problems at the end of each lesson check for procedural fluency, for example, in Lesson 3-2, "A grocer orders boxes of macaroni and cheese for the store. The shelf is 8.43 feet wide. Each box is 0.125 feet wide. Find the number of boxes that will fit in each row on the shelf." Also, Do You UNDERSTAND? problems at the end of each lesson check for conceptual understanding, for example, in Lesson 4-3, "Draw a model to show the product of *a* and *b*, where a < 0 < b. Explain your model." For instance, "Pull It All Together Tasks" are performance tasks at the end of each topic in which all concepts from the topic culminate into a multi-step problem-solving activity. The materials include a category of materials labeled "Progress Monitoring," with three subcategories—"Diagnostic Assessments," "Unit Assessments," and "Prerequisites Assessments." Diagnostic Assessments contain a beginning-of-the-year assessment that can be administered digitally with mostly open-ended questions that address skills from prior grade levels. Unit Assessments contain a summative assessment for the end of the unit (six total), a Mid-Year Test, and an End of Year Test. Each unit of Instruction has a unit Prerequisite Assessment, designed to assess student readiness for new content. Teachers can administer these in both digital and print formats. The materials include "Close and Check" questions for each lesson as an informal formative assessment at the close of the lesson to determine if the students understand the day's concepts and can answer the daily "Focus Question."

The "Program Overview Guide" guides teachers through the structure of the materials, which includes information on how to use the various diagnostic tools and formative assessments. For example, the Overview Guide explains that the unit prerequisite diagnostic assigns students to a learner level based on their results (threshold of above 70% versus below 70%) with the teacher's ability to change the threshold or move an individual student to a different learner level assignment. The Prerequisite gives the teacher easy-to-find links, enabling them to assign the diagnostic to a class, group, or student; add the diagnostic to a "playlist"; as well as edit the prerequisite by removing questions. The teacher also has a link to the remediation lessons that result from the diagnostic. The materials include recommendations for teachers to use with struggling or advanced students during formative assessments, which incorporate suggested tools or extensions. For example, the "Solution Notes" for Part 2 of Lesson 3-2 suggest that teachers emphasize the purpose of moving the decimal point when dividing decimals and extends this by providing tips for struggling and advanced students. Specifically, for struggling students, it suggests the teacher have students add placeholder zeros in the problem. For advanced students, it advises the teacher to ask students what happens if they move the decimal place beyond the minimum required movements. The materials provide pacing guides

for lessons and diagnostic tools. For example, the Unit A Teacher Guide lists a pacing of 11 days for the entire unit. Teachers should administer the prerequisites assessment on day 1 and the unit summative on day 11.

While the materials provide a few recommendations for teachers to have English Learners self-check their progress, and mainly for the acquisition of language versus attainment of mathematics proficiency, the materials do not include formal methods and guidance for all students to track their own progress and growth. The materials provide students with solutions to the problems within the lesson, as well as immediate feedback, through the "MathXL for School" online grading system, on their assessments, such as the prerequisite test, unit test, and topic tests. However, this is the extent of feedback that students receive, and the materials lack focus on progress reflection and growth tracking.

The diagnostic tools are designed to measure all content and process skills, as outlined in the grade-level TEKS as presented in the Program Overview Guide; however, individual assessment items do not have the associated standard attached to them to determine if, indeed, all standards are assessed. The tools have a cluster of student expectations attached, indicating which standards are assessed within the entire assessment. For example, Topic 2 Test covers standards 6.3A, 6.3B, 6.3E, and 6.8D—this information is found in the Resource tab by clicking the graph icon. The diagnostic tools, including the Beginning of Year, Mid-Year, and End of Year tests, Unit Tests, and Prerequisite Assessments, have all been aligned to measure the content standards of the sixth-grade math TEKS. However, the test information or answer keys do not cite process standards. The lessons throughout the materials include formative assessments with the Close and Check phase, which includes both content and process skills as outlined in the sixth-grade TEKS. The Homework and Practice cite content standards. For example, Lesson 7-3 cites the process standard 6.1G and the content standards 6.9B, 6.10A, and 6.10B in the Close and Check. The Homework cites 6.9B only, which is not inclusive of all the content standards and none of the process standards.

November 2020

Savvas Digits Grade 6

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 recommendations for responding to student needs within mathematics based on data from one of the assessments. The materials provide guidance for teachers to support their understanding of the results of diagnostics tools by Class Results, by Assignment and Class Mastery, and by Standard. Teachers can also click on a data point to view assessment questions that contributed to the score, student responses, and each question's assignment. The materials provide a variety of suggestions and activities for teachers to use to address the results of student assessments, such as intervention lessons, enrichment activities, and lesson check activities (which are part of the intervention activities). The "Program Overview Guide" does mention that the material is for Teachers and Administrators. The materials do not explicitly state elsewhere that there is guidance information for administrators; however, administrators can view data results in the data tab. The data can be viewed by class and students, but no evidence was found that data is collected by the school. Administrators can then use the same guidance and support available for teachers to design instruction and respond to data.

Evidence includes but is not limited to:

The materials include guidance for scaffolding instruction based on a student's needs as demonstrated on the "Prerequisite Skills Assessments" and offer suggestions to provide

scaffolds for the content, process, or product of the content and skills addressed within the unit. For example, at the beginning of Unit A, the Prerequisite Assessment addresses the skills necessary for understanding the four topics within the unit: Integers and Rational Numbers, Multiplying and Dividing Fractions, Fluency with Decimals, and Integer Operations. If the test shows deficits in any of the skills, the teacher assigns students the appropriate study plans, which could include Adding and Subtracting Decimals, Comparing and Ordering Decimals, Comparing and Ordering Fractions, Divisibility Rules, Dividing Decimals by a Whole Number, Estimating Sums and Differences of Decimals Dividing: 2-Digit Divisors/Quotients, Fractions and Division, and many others. Depending on the data, the start of each of the four topics would include either an "Enrichment Project," for those who have mastered the prerequisites, or a small group Prerequisites Lesson.

The materials provide embedded scaffolds in the homework and prerequisite activity, based on the results of the "Prerequisite Assessment" in the Unit. Additionally, based on the learner group, teachers can use the scaffolds in the teacher guides that address struggling, on-level, and advanced learners. For example, the "Prerequisite Activity" for Topic 3 includes two separate scaffolded activity sheets for students—Team K Activity for the on-level group and Team G Activity for the advanced group. Team G essentially has the same activity but must use an additional piece of data that adds to the complexity of the calculations. In addition to this, some students complete remediation lessons rather than completing the activity if they struggled with the Prerequisite Assessment. For example, Part 1 of Lesson 12-5 includes solution notes, but the material also extends recommendations for struggling and advanced learners. The material instructs the teacher to help struggling students reorient the triangle's top to better identify the base and height for area calculation, while advanced learners can use the Distributive Property to rewrite the algorithm to ready them for the algebraic formula.

Scores data covers test scores, including detailed standard, question, student, and performance analysis. For example, the Data tab of the "Digital Learning Platform" has an option to view class results by assignment or by standard. When reviewing the scores of an assignment, Data displays and color codes the average scores on a completed test (blue = 80%-100%, yellow = 60% - 79%, red = 0% - 59%). From this view, teachers can click on a bar or point of the graph to see how well individual students scored and their individual responses. Materials provide teachers support for planning instruction and differentiation based on data gathered from the Prerequisite Skills Assessments. For example, each unit begins with the Prerequisite Assessment, which screens every student for an understanding of the unit's prerequisite concepts. The data of the Prerequisites Assessment develops personalized study plans for each student specific to their deficient skills. Additionally, each topic within a lesson includes Prerequisite Lessons, and the results of the Prerequisite Assessment help determine which students could benefit from the small group instruction it utilizes.

The materials provide a variety of suggestions for teachers to use based on the results of assessments. For example, individualized study plans are prepared for students based on their prerequisite tests; however, teachers can adjust individualized plans or groupings based on

their discretion. The variety of suggestions include differentiated homework, differentiated groupings for the Prerequisite Activity, and specific modifications in the lesson instructions for struggling and advanced learners. Also, differentiated suggestions for ELPS levels beginning, intermediate, advanced, and advanced high are provided for lesson parts, which can be translated to varying levels within the classroom that are non-ELL population. The ELPS guidance gives specific activity instructions tailored to the leveled learning groups. The materials provide teachers with support for differentiating instruction based on diagnostic tools data. For example, when learning about Multiplying Two Fractions, the teacher guide instructs teachers to shade models to represent multiplying fractions for struggling students and allow advanced students to inspect the three example problems and write a rule for multiplication.

The “Acknowledgements and Copyright” section of the material notes that material is for Teachers and Administrators: “This work is...provided solely for the use of teachers and administrators in teaching courses and assessing student learning in their classes and schools.” The materials do not explicitly state elsewhere that there is guidance information for administrators; however, administrators can view data results in the data tab. The data can be viewed by class and students, but no evidence was found that data is collected by the school. Administrators can then use the same guidance and support available for teachers to design instruction and respond to data.

November 2020

Savvas Digits Grade 6

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 formative assessment opportunities. The materials provide routine and systematic progress monitoring through the topic, unit, and prerequisite assessments. Additionally, each lesson has routine "Got It?" tasks that act as formative assessments. The materials accurately measure and track student progress in each lesson through the "Close & Check" section and algorithmic tasks and methods, such as reasoning questions and error analysis. The materials also accurately measure student understanding at a Topic and Unit level through assessments and track their progress through the year on a TEKS standard basis, where students' mastery status on a standard is updated as new tests are submitted.

Evidence includes but is not limited to:

The materials include suggested pacing and routines for checking the progress of students. For example, the "Progress Monitoring" portion of the program includes a "Diagnostic Assessment," which teachers deliver at the beginning of the year, a "Mid-Year Test" given after the delivery of the first three Units, and an "End of Year Test" given after the delivery of the last three Units. Additionally, teachers deliver a "Unit Assessment" at the conclusion of each unit, as well as a "Topic Test" delivered after each topic. The progress monitoring opportunities accurately measure and track student progress. For example, the beginning, middle, and end of the year tests are spaced out throughout the year and assess the same standards so that the classroom teacher can make an accurate comparison of a student's growth throughout the year. Additionally, teachers can also compare the Unit Assessments delivered throughout the year to the Beginning of the Year Test to see how students have grown immediately following content instruction. Teachers formally and informally administer diagnostic, formative, and

summative assessments at regular intervals throughout the curriculum. “Math XL” grades the diagnostic and summative assessments, providing progress monitoring data for each student.

The materials provide routine and systematic progress monitoring opportunities that allow teachers to gather information regarding student understanding throughout a Lesson, Topic, or Unit. For example, each Lesson has Got It? sections embedded in lesson parts that act as checks for understanding. More systematically, materials provide an assessment at the end of each topic, as well as an assessment at the end of an entire unit. Both assessments provide real-time results for teachers with direct feedback on which standards students need additional practice. The materials accurately measure and track student progress in each lesson through the Close & Check section. For example, in each lesson’s Close & Check, a student receives a variety of assessment types. These assessments typically begin with an open-ended question relating to the lesson, followed by two to three “Do You Know How?” questions that assess the student’s ability to perform mathematical functions, and end with two “Do You Know Why?” questions that assess a student’s conceptual understanding through a variety of ways such as reasoning questions and error analysis. Additionally, the materials contain a Data tool that allows teachers to see what standards students have mastered on assessments. As noted in the materials, “The scores show the results from assessments taken so far this school year, so a student's mastery status on a standard may change as new tests are submitted.”

The materials include an appropriate frequency of assessment that reflects the variable rate of student learning at this age. For example, there are three cumulative tests throughout the year, assessing the bulk of the grade level content. Additionally, the materials deliver Unit Assessments throughout the year after each unit. These assessments focus solely on the content just taught. The materials provide options for progress monitoring as appropriate for the age and the content skill. The types of questions utilized throughout the materials are aligned with the grade-level content, as written in the TEKS. Additionally, the question format aligns with the multiple-choice format of STAAR. Additional formatted questions are appropriate for the grade level and content. For example, the Unit C Test has some open-ended questions, and the situations to address the content of the unit reference students in a school jazz band, kids at soccer practice, and books in a school library.

The materials guide teachers in administering progress monitoring assessments in an appropriate frequency for students at this grade-level. For example, each topic ends with a formal topic assessment, and each unit ends with a formal unit assessment. The materials organize the results of these assessments so that teachers can view mastery by standard and question, as well as view results by the student or the class as a whole. The materials provide options for progress monitoring through various views in the Data function of the digital materials. For example, the materials update the standards students have mastered during the school year as they take assessments. There are options to sort the report by student mastery of that standard, as well as providing a description and link to learning resources for a standard when the teacher clicks on a particular standard code. Additionally, the teacher can see progress after a student has taken a prerequisite assessment to view recurring gaps.

The materials instruct teachers to provide regular formal and informal assessments of specific age-appropriate content as outlined by the TEKS. For example, teachers administer formal prerequisite assessments before each of the seven Units, and the materials suggest intervention lessons for each student based on the results of these assessments. Teachers administer formal Summative assessments at the end of each Topic and Unit. For example, the end of each lesson provides informal assessments with the use of the formative Do you KNOW? and Do you UNDERSTAND? questions. The materials provide age-appropriate progress monitoring through formal assessments administered three times a year. For example, the curriculum includes Beginning of Year, Middle of Year, and End of Year assessments to help monitor students' progress through content development.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 1/2

The materials provide the recommended targeted instruction and activities for students who struggle to master content, as well as those who have mastered the content. Lesson pre-assessments provide guidance for teachers, indicating students' learner levels by letter—G for advanced learners and K for struggling learners. Lesson prerequisite activities include different activities for both learner groups G and K. Materials provide struggling students with intervention and remediation lessons. The "Teacher Guides" include readily-accessible differentiated suggestions and supplemental supports to the teacher, including differentiated instruction sections that provide suggestions for struggling students and advanced students. However, the resource material does not offer additional activities beyond the targeted instructional suggestions for students who have mastered the content. The material includes enrichment activities; however, the activities are not differentiated for learners at all levels. Advanced students are provided enrichment activities, more thorough tasks, and leveled homework and activities—with the ability to skip the remediation activities if successful on the prerequisite. The teacher has the autonomy to reassign students as they see appropriate.

Evidence includes but is not limited to:

Throughout the materials, each topic includes a prerequisite skills lesson. Each topic throughout the materials includes a "Prerequisite Lesson" to engage the students in prior skills and move forward with new information. The materials present these lessons as three separate examples for working through, either in whole group or collaborative groups. The materials provide differentiated instruction for both struggling and advanced students, each with one to two suggested adjustments to the activity or questions. For example, the sixth grade Lesson 9-1

suggests for struggling students that “Some students may benefit from drawing 12 circles to represent the 12 coin tosses. They can then label 7 of the ‘coins’ with an ‘H’ to represent the 7 heads. The number of coins without the H represents the number of coins that landed on tails.” For advanced students, it suggests “Ask students to also write the ratio of the number of tails to the number of heads, the number of heads to the number of coin tosses, and the number of tails to the number of coin tosses. Have students discuss how the four different ratios are related.” The materials provide an embedded scaffold, using the prerequisite assessment at the start of each unit, and group students into leveled learning groups based on areas of need or readiness for extensions. Leveled homework and practice problems are assigned based on prerequisite results and are intended to close gaps recognized from the prerequisite assessment. For example, in Unit 10, an area of remediation is calculating the area of rectangles and squares. Within the remediation module, students observe an online manipulative of shapes on a square grid using the shapes to count square units. Materials include homework practice for each lesson available for on-level and below-level students.

Teacher lesson guides include differentiated instruction sections that provide suggestions for advanced students. For example, Lesson 15-4 suggests that teachers ask advanced students to build a relative chart using the information in the charts already provided. However, the materials fail to provide activities for students who have mastered the content. There is no evidence supporting guidance for targeted instruction. Each lesson does have an “Enrichment Project” guide, which teachers could use for extension and deeper learning; however, the lessons themself do not provide recommendations for upward scaffolds.

The resource provides enrichment activities that it refers to as “Enrichment Projects.” For all 17 on-grade level topics, the resource provides one enrichment project. The projects, however, have limited differentiated activities for learners at varying levels. For example, Topic 4 includes an enrichment project entitled *A Puzzling Operation* that requires students to conduct research and make a puzzle to extend and apply their knowledge of integer operations but makes no suggestions to differentiate beyond advanced and struggling learners. Materials provide enrichment projects for students who have mastered the content in the prerequisite assessment but also for those students working through the re-teach lessons. The enrichment projects provide teacher notes on how to differentiate for struggling versus advanced students. For example, Enrichment Topic 11 explains that struggling students would be given keywords to help them research an upcycling process with materials, while advanced students would be asked to research the actual process of how plastic is recycled and determine how much is reincorporated into new plastic products.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 1/2

The materials provide a variety of instructional methods that appeal to a variety of learning interests and needs; however, they only provide some guidance to support the teacher in selecting instructional methods and strategies and facilitating the grouping of students. The lessons provide a variety of instructional approaches for different learning interests and needs, which entails technology, graphic organizers, engaging videos, and diverse cultural representation. Program material includes lessons that incorporate a variety of different instructional approaches, including whole group, independent practice, guided instruction, and group collaboration. The material does not, however, guide teachers in selecting appropriate teaching strategies to meet the needs of individual students or assist teachers in understanding how and when to use developmentally-appropriate strategies. The program markets a flexible design that encourages teachers to adapt the material to their unique teaching styles. The program material provides activities and routines for whole and small group instruction and some suggested activities for one-on-one interventions. Program materials provide students an opportunity to practice with the teacher and peers but do not support the teacher in facilitating the flexible grouping arrangements. The materials provide opportunities for differentiation and support, as well as exploratory learning; however, they provide little guidance for the teacher regarding when and how to adjust the student grouping.

Evidence includes but is not limited to:

The materials use multiple teaching strategies and teaching methods to meet students' different learning needs. Each topic offers several lessons, and the lessons contain a "Launch" or introduction and "Parts" representing teaching and practice where these various teaching methods can be found. Each lesson details techniques, strategies, questions, models/manipulatives, or implementation; suggests ELPS to incorporate throughout the lesson; details math background including content from prior exposure and the alignment to current content; and features a differentiated instruction note throughout each part of the lesson that details what to look for with struggling students and the enrichment activities that advanced students can complete. For example, in the sixth-grade materials, Lesson 9-2 recommends incorporating number lines to model concepts using ELPS 3E, 4G, and 5E and connection to prior lessons for ratios and possible exposure to connecting ratios to fractions and decimals. The materials include videos, hands-on, concrete practice with manipulatives or online embedded activities, solve and check problems with solutions, suggested group work for collaboration, as well as enrichment activities geared toward engaging students with real-world applications. Each of the enrichment activities includes a variety of instructional approaches as well. For example, Lesson 13-1 begins with a diagrammed introduction question, followed by an animated diagram explaining the theorem. The module follows with fill-in-the-box and drag-and-drop practice problems.

The presentation format for each lesson throughout the materials is identical, but the activities within the lessons support the use of a variety of instructional strategies to support delivery. Developmentally-appropriate instructional strategies include exploration with digital manipulatives, teacher modeling with the Launch and three examples of a new concept, "Close and Check" questions at the end of every lesson for opportunities to problem solve with teacher support, and supporting language with details for which ELPS to utilize throughout each phase of the lesson. The design of the materials includes instructional routines designed to support students in engaging with the content and skills present in a lesson. For example, the on-level lesson has three parts. The digital platform for the teacher's instruction displays the three parts, and the "Student Companion" provides students an area for note-taking corresponding with the instruction. The Launch provides the engagement piece with math content with real-world connections to build on prior knowledge and establish new knowledge. The activities bundled within the lesson provide direct and explicit instruction of content. They incorporate animations to pull attention to important details. Finally, the Close and Check ties all components together and summarizes the lesson. The practice continues through the "Do you know HOW?" section and extension of knowledge through the "Do you understand?" section.

The material provides multiple opportunities for students to engage digitally, including leveled practice activities; digital manipulatives such as number lines, fraction models, area models, and more; paper-based lesson companions; English to Spanish translation; audio read alouds; and a digital glossary. The materials also include an "Enrichment Activity" for each lesson that contains various opportunities for students to engage with the content, such as collaborations and real-world problems in various PBL activities. The lessons are structured with a digital

engagement activity, teacher-led lesson, digital lesson practice with language and audio supports, as well as digital manipulatives, digital leveled practice, and a check for understanding.

The materials support the use of a variety of instructional strategies to support delivery. Developmentally appropriate instructional strategies include exploration with concrete, hands-on materials; “Math Background” sections, so the teacher knows what skills have been taught in prior grades; teacher prompts and “think-alouds” before the activity, during the activity, and after the activity; opportunities to problem solve with online, teacher, or group support; and supporting language with pictorial support, videos, multilingual glossaries, and sound play buttons.

The program material includes “Prerequisite Lessons” with accompanying teacher guides to provide some guidance to help teachers understand how and when to use strategies. Prerequisite lessons separate students into learning groups applicable to the corresponding unit of study. Program material also includes interactive activities designed for individual exploration, for example, in Lesson 10-3, Part 1. While the program does include intervention lessons, these clusters of lessons build foundational skills and do not support students who need one-on-one attention for a particular skill or concept. Intervention lessons are designed for whole or small group. Topic and lesson guides support teachers with Math Background sections that provide information on prerequisite skills that students should have attained to support success in the current topic or lesson objectives. The “Program Overview Guide” includes a flexible implementation plan but only for technology integration. The program does have differentiated homework activities and suggests that teachers adjust instruction based on student performance but does not provide guidance on how to adjust instruction. No evidence has been found that demonstrates how the material supports teachers in understanding how and when to use strategies. The program states that it was intentionally designed for flexible teaching based on teachers’ own personal style and best practices. The materials provide some guidance to teachers on when to use a specific grouping structure based on the needs of students. For example, materials note that teachers should group students for small group instruction during the prerequisite lessons for those students who demonstrate weaknesses. The teacher guides for each unit, topic, and prerequisite do not show evidence or guidance on which students should receive what type of grouping structure. Additionally, there is no evidence suggesting what specific weakness is identified. The Program Overview Guide states that, after administering the Prerequisite Assessment at the start of a unit, teachers “establish student’s learner level” and “Scores are used to automatically assign individualized study plans for each student to intervene in areas of weakness.” However, guidance for specific grouping structure is not evident regarding the new/grade-level content. While the materials consistently provide grouping between struggling learners and advanced learners via differentiated homework and differentiation of the activities’ tasks, they do not provide a significant amount of guidance for small group instruction, and teacher guides are generally geared toward large group instruction. Note that the program overview does state that the teacher would use prerequisite assessment results to group students between groups K for struggling learners and

G for advanced learners for a prerequisite lesson. The materials do provide learning experiences that teachers can adapt to different structures of grouping; however, they do not give explicit instructions on how to implement these experiences within different structures. For example, Lesson 5-2, Part 2 suggests that struggling students write the order of operations in each step of a blank "Think-Write" organizer, and then the teacher calls on students to fill in each step according to the order of operations. The materials provide activities for students who need more one-on-one support, as there are suggestions throughout the curriculum that provide additional practice, alternate explanations with the use of manipulatives, and clarification on common errors made. For example, some activities, such as Lesson 3-1, Part 1 "Solution Notes," suggest students create a checklist to use when multiplying decimals.

The materials do provide activities for large group instruction and small group instruction. The materials provide detailed guidance regarding the flow and sequence of a lesson, as well as what learning opportunities to provide to students who struggle or students who excel. However, there is no evidence regarding what parts of the materials are best suited for whole group, teacher-lead, collaborative grouping, or independent practice. Students can attain individual exploration through the "Enrichment Project" for each Topic. Each project presents students with a real-world problem in which they must organize, plan, research, write, and present findings related to the Topic content. According to the materials, students can complete projects individually, in small groups, or in whole group. These projects align with the prerequisite lessons and can be used for students who do not need review in that content. This recommendation is included in the program guide but not specifically referenced within each activity's teacher guide. The materials include diagnostic checks that automatically create an individual study plan for each student. The teacher can modify these plans, and the materials suggest that teachers discuss study plans with students before each Unit. The materials suggest that on-level students with occasional weaknesses work independently through the intervention lessons. It also suggests that students with large gaps use a small group setting, such as an intervention pull-out or Title 1 class.

The material also provides students an opportunity to practice with the support of the teacher, such as in teacher-guided instruction as outlined in Teacher Guides with guiding questions and problems to solve; independently; or with other peers, as seen in "Think-Pair-Share" activities and team exercises such as *Designing a Playground* in prerequisite lesson r12. However, the material does not provide teachers with support in facilitating guided, collaborative, and independent practice. The lessons provide opportunities to practice independently, with peers, or as a class. While the majority of the guidance is geared to class or individual activities, such as class discussions or student companion documents to work through topics, there are suggested team breakouts within the teacher guidance for each topics' Prerequisite lesson. For example, the Prerequisite lesson for Topic 7 breaks teams out between Team K and Team G. Within other pieces of the lesson, the teacher guides students through class discussions, and students have companion sheets for individual work or assessments. Sample answers, common errors, and suggestions to guide students to the correct answer are provided in detail for all activities.

November 2020

Savvas Digits Grade 6

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 various linguistic accommodations aligned with the English Language Proficiency Standards (ELPS) for students who are learning English, particularly regarding their level of English language proficiency. The lesson guides provide explicit instructional suggestions for ELs at the different proficiency levels. The instructional strategies are sequenced in a way that supports students at varying levels and allows for repetition that is playful and interactive. The materials provide research-based scaffolds to support English Learners (ELs). The design of the material, with embedded videos, illustrations, and demonstrations acting as supports, make scaffolding intentional and natural in the lessons. Additional supports include a comprehensive bilingual glossary in English and Spanish and downloadable PDFs that contain word lists and glossaries in Cambodian, Cantonese, Haitian-Creole, Korean, Vietnamese, Hmong, Filipino (Tagalog), Mandarin, and Spanish. The "Program Overview Guide" has instructional strategies provided for every principle of the Building ELL Lessons Framework. The materials encourage the strategic use of students' first language if their first language is Spanish; however, the materials do not follow the same explicit support for students whose first language is any language other than Spanish.

Evidence includes but is not limited to:

The materials include various linguistic accommodations aligned with the ELPS for students who are learning English, particularly regarding their level of English language proficiency. Each teachers' lesson guide includes a section highlighting the ELPS addressed explicitly during the lesson. For example, Lesson 1-1 informs teachers that the lesson aligns with the cross-curricular

and listening standards: “The ELL listens to a variety of speakers...to gain an increasing level of comprehension of newly acquired language in all content areas.… The student is expected to: (C) learn new language structures, expressions, and basic and academic vocabulary heard during classroom instruction and interactions; (D) monitor understanding of spoken language during classroom instruction and interactions and seek clarification as needed.” The materials provide a variety of effective strategies for teachers to support students at different English language proficiency levels. The lesson guides provide explicit instructional suggestions for ELs at the different proficiency levels. For example, in the same lesson on Integers and the Number Line, the teacher guide suggests that teachers “play the audio and visual for each vocabulary term for Beginning level students, instructing students to focus exclusively on the term itself and the image. Then play the audio again for each term, one-by-one. Have students get up and point to places on the number line that represent each term they listen to. For Intermediate level students, pause after playing the audio for each vocabulary term, and have students take notes on what they heard. Then have students use their notes to share with a partner what they know about each term. As you circulate, check for understanding. For zero, students might write not positive, not negative; for whole numbers, students might list 2, 3, 4. With Advanced level students, have students listen to the audio for each of the terms. Then one partner should name a number, and the other student should find its place on a number line. Then they should use the interactive image to classify or categorize that number, and finally, with Advanced High level students, after students have listened to the audio for each of the terms, have them address the following writing prompt: Which of these number types overlaps with another? The instructional strategies, as described above, are sequenced in a way that supports students at varying levels and allows for repetition that is playful and interactive.” For example, Lesson 1-5 asks students to order rational numbers. The instructions for the Beginning level consist of providing a shorter list of whole numbers on an index card, and the Intermediate level revises the process by having students compare two numbers to each other at a time to assist in ordering. The directions for the Advanced group begins with grouping students into fours and assigning each student a number, followed by questioning about students to help them order, and the Advanced High group work in pairs explaining to each other how to convert a fraction to a decimal. In another example, when learning about converting decimal ratios to fractions in sixth grade, teachers are encouraged to use the lesson video of riding a bicycle to define the academic and non-academic vocabulary used in the lesson and to pair Beginning ELs with Advanced or Advanced High ELs to take turns providing commentary during multiple viewings of the lesson video.

The materials provide research-based scaffolds to support ELs. Some of the research is based on the work of one of its authors, Dr. Jim Cummins, who is the Professor and Canada Research Chair in the Centre for Educational Research on Language and Literacies at the Ontario Institute. Dr. Cummins’ research that has helped shape the pedagogy provided in the materials focuses on literacy development in multilingual school contexts. As a result of this and other research on developing academic language, the materials have a defined ELL Curriculum Framework outlined and described in the “Program Overview Guide.” The design of the material, with embedded videos, illustrations, and demonstrations, provides supports that

make scaffolding intentional and natural in the lessons. For example, the topic openers introduce academic vocabulary with a visual representation and auditory explanation of how they will be addressed in the lesson. Additional supports include a comprehensive bilingual glossary in English and Spanish and downloadable PDFs that contain word lists and glossaries in Cambodian, Cantonese, Haitian-Creole, Korean, Vietnamese, Hmong, Filipino (Tagalog), Mandarin, and Spanish. While there are tips and suggestions to help students' development of academic language and instructional strategies provided for each of the principles of the framework, the materials do not include suggestions for small-group instruction that focus primarily on language development. The materials give extensive guidance on modifying the presentation of mathematical content for ELL students for them to gain meaning from the lesson. For example, in the Program Overview, the following are only a portion of suggestions made to guide teachers in appropriate scaffolding for ELL students: "Use Demonstration—providing clear and explicit step-by-step procedures when approaching word problems; Use Manipulative (and Tools and Technology)—an emphasis is made that teachers encourage the use of these tools 'within the context of a project that students are intrinsically motivated to initiate and complete;' Small-Group Interactions and Peer Questioning—the materials are laden with suggestions for small group and peer discussion within ELL leveled groups; Use Pictures, Real Objects, and Graphic Organizers—this includes pictures, graphic organizers, real objects, etc." For example, in many lessons, the use of pictorial models introduces the concept.

The Program Overview Guide provides instructional strategies for every principle of the Building ELL Lessons Framework. These strategies are user-friendly, specific, and include an additional section related to an application specifically in the material. For example, Principle 1 is "Identify and Communicate Content and Language Objectives." The guide suggests that teachers "present the content objectives using visual aids, graphic organizers, and paraphrasing" (among other instructional strategies). Then the guide goes further by stating that, to apply this principle while teaching, teachers should use the "Prerequisite Lessons" to present lesson objectives before beginning the lesson and rewrite them in simpler language as they are posted on the board. The materials encourage the strategic use of students' first language if their first language is Spanish; however, the materials do not follow the same explicit support for students whose first language is any language other than Spanish. For example, students can find vocabulary words pertinent to each lesson by clicking on an icon in the digital material; students will find a written definition, audio presentation, and Spanish version of the term provided. The materials include specific guidance within each lesson that addresses the ELPS but also gives an extensive toolbox to the teacher in the Program Overview. For example, ELPS guidance and suggestions are broken out by language acquisition levels within the lesson teacher guides. Additionally, the program overview provides a substantial amount of suggestions for teaching strategies that align with the five principles of teaching ELs. The materials provide some guidance to teachers on how to use students' first language to access current vocabulary. For example, in a section titled "Clarify Language," the materials elaborate on how to use the first language to acquire new vocabulary. The overview explains that because much of the English technical mathematical language has roots in Latin and Greek, the vocabulary has cognates in "Romance languages such as Spanish (e.g., addition—adición)." Per

the overview, these languages should be encouraged to use cross-linguistic linkages. The materials also suggest the use of bilingual dictionaries, as the Spanish-English dictionary is embedded in the content already and readily accessible in the toolbar. The use of students' first language is encouraged in the ELPS section of the Program Guide as an accommodation for formal and informal assessments. For example, possible assessment accommodations include bilingual dictionaries, dual-language assessments, and the use of native language in written responses. The materials also provide students with native language, on-demand support with the use of online Multilingual Glossaries, as well as online Spanish translations for tasks in the lessons.

November 2020

Savvas Digits Grade 6

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 contain a plan for year-long instruction of the grade-level content and processing TEKS. The program overview supplies teachers with a year-long outline of the material by unit, topic, and lesson. The curriculum is cohesively designed to build upon students' knowledge and skills across grade-levels and within the grade level. The "Math Background" provided in the Unit, Topic, and Lesson teacher guides give extensive guidance to the teachers on the review and progression of concepts between grade levels and lessons in the current grade-level. Topics provide ample reviews, and each unit also contains a review that covers all unit topics. Additionally, the materials contain "Mixed Reviews" with the spiraled practice of various concepts covered within the grade-level. The materials provide practice opportunities that build in complexity through the Lesson as well as across the Topic.

Evidence includes but is not limited to:

The materials include a plan for instruction that spans the year, as well as vertical alignment showing how concepts and skills align in other grade levels. For example, the materials outline the overarching concepts, how they are linked to the Texas Curriculum Focal Points, and in what sequence they should be taught. Each topic notes the TEKS, so the teacher can verify that all the standards are appropriately addressed. The Scope and Sequence of the Intervention Lessons connect prior skills to current content and align with the needs of sixth, seventh, and eighth grade. For example, the Topic Teacher Guide details what TEKS are taught during the current set of lessons, what TEKS from prior grade levels align, and what TEKS these new skills will align with in the future. The Topic 5: Variables and Expressions teacher guide notes the current TEKS, 6.3D, 6.6C, 6.7A, and 6.7C. Prior skills include 4.5A, 5.4E, and 5.4F. Future skills

include 6.7B, 6.9A, 6.10B, and 7.7. The materials include guidance that supports the teacher in understanding the vertical alignment for all focal areas in Math Texas Essential Knowledge and Skills in preceding and subsequent grades. For example, the Math Background included in the Topic and Lesson teacher guides support the teacher's understanding of current skills, what skills they have learned in the past, and how they are interconnected.

The materials contain an outline of the instruction covered for the year, which includes details of vertical alignment within the teacher guides. The outline also includes an explicit mention of Focal Points, TEKS, and ELPS covered in each unit. The materials are designed to build on students' previous knowledge and skills and sufficiently provide the teacher with vertical alignment details for all focal areas in Math Texas Essential Knowledge and Skills in previous and upcoming grades, as well as within the grade-level itself. For example, the Topic 13 teacher guide begins with a table containing two columns, Looking Back and Looking Ahead, which contain the specific TEKS related to the topic that have been covered in previous grades and TEKS that will be covered in upper grades, as well as the current grade-level TEKs. Following this, it includes detailed paragraphs describing the progression of skills from previously learned grade 4 and grade 5 concepts to how the current grade-level topics will be built on in grade 7. For example, in the Lesson 5-5 Teacher Guide, the Math Background section begins by stating that students learned about identifying and distinguishing numerical and algebraic expressions, including the associated vocabulary. It follows by stating students will learn to substitute variables with numerical values to evaluate expressions and expands on how the skill will build into solving more complicated expressions and a necessary skill to check solutions in the upcoming topic where students will need to check solutions to equations.

The materials contain a plan for year-long instruction of the grade-level content and processing TEKS. For example, the "Program Overview Guide" contains three alignment documents. The first contains an outline of the Units and Topics, and it highlights which Topic covers each of the Texas Focal Points, usually in a range of 3–8 Topics. The second is a more in-depth document that details which topics cover which lessons, as well as the specific content and processing TEKS covered in that topic. The third document in the Program Overview Guide defines each of the TEKS and includes all of the specific lessons in which it appears. Cohesive instruction in the lessons allows students and teachers to make content connections between lessons and previous grade levels. For example, the Teacher Guides contain a section titled Math Background that details the instructional purpose of the current unit, topic, or lesson and also gives insight into the methods used to introduce the aligned TEKS in previous grade levels. This section also includes details of how the current instruction will build to later courses. The materials give information in each Topic regarding the vertical alignment of the curriculum. For example, the Teacher Guide for the Topics includes the definition of the TEKS covered in the lesson, as well as a "Looking Back" section that defines the alignment of the TEKS from fifth (and in some cases fourth grade) as well as a "Looking Ahead" section that defines the alignment of the TEKS for seventh and eighth grade, as well as some high school courses.

The materials provide reviews and practice throughout the curriculum and build upon previously taught content throughout each lesson. For example, each lesson throughout the book provides opportunities to practice the content with a variety of application processes. In addition to the differentiated homework included with each lesson, there is also a Mixed Review. Lesson 6-3 practices the content of the unit throughout the lesson and within the homework. It includes an additional five questions reinforcing the skills of evaluating algebraic expressions and generating equivalent fractions and decimals.

The materials provide reviews on a topic level but also include cumulative reviews that cover an entire unit. Additionally, the materials also include Mixed Reviews in each lesson that cover major areas that span across the various concepts in grade 6. These reviews are consistent across all units and topics. For example, each Topic review contains a vocabulary review task, a "Pull It All Together" activity, a "Topic Close" activity, and a "Topic Review" homework assignment. For example, the Lesson 11-3 Mixed Review contains questions covering the evaluation of expressions, writing expressions, and converting decimals to fractions. The practice materials build upon content from previous grades and within the previous lessons from the current grade level. For example, in Topic 4, the lesson begins introducing unit rates and then leads to using rates to find a common measurement. The lesson that follows entails plotting ratios and rates on a coordinate grid, requiring calculating rates.

The materials provide regular and consistent review practices throughout the entire curriculum. For example, at the end of each of the 18 topics, the materials provide a review that opens with a "Topic Vocabulary Review Game" to be played in either whole group or small group according to the Teacher Guide and a Pull it All Together task that includes a multi-step problem that utilizes multiple tasks from the topic and includes a holistic scoring rubrics for teachers to assess student understanding of the content. The review continues with a wrap-up video that culminates content from the lesson with a real-world situation, then presents students with content practice as a review homework assignment.

The materials provide practice opportunities that build in complexity through the lesson as well as across the topic. For example, when learning about equations and inequalities in sixth grade, the Topic begins with highlighting the difference in Expressions and Equations, then progresses through balancing equations and continues to Solving Equations. The Balancing Equations lesson initially presents students with keeping both sides of a number sentence in balance using whole numbers; then the lesson increases in rigor to end with keeping equations in balance with variables.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 1/2

The materials support teachers in understanding how to use the materials as intended by including a "Program Overview Guide," "Topic Teacher Guides," and "Lesson Teacher Guides." Additional supports for teachers include the virtual manipulatives in the digital program and the grids and organizers. Teachers can use these tools to model skills and concepts for students. The materials are organized in a way that makes sense for ease of implementation and accessibility. The Program Overview provides the "Scope and Sequence," along with detailed guidance on the structure and purpose of the lesson parts. The Scope and Sequence documents do not specifically address how the TEKS build and connect across grade levels. The materials guide teachers on routines within lessons, thereby facilitating easier implementation. The materials provide an adequate amount of lessons across all topics, with reasonable and appropriate pacing suggestions in the Unit teacher guides. There is a lack of guidance specifically aimed at administration in regards to supporting teachers and using tools to recognize best instructional practices and arrangements in a middle school classroom. While it is inferred that the material is accessible to administrators with the same support provided for teachers, there is no specific information separate for administrators to support teachers in implementation.

Evidence includes but is not limited to:

The materials include a Scope and Sequence aligned to the TEKS, outlining which essential knowledge and skills are reviewed, taught, and covered in future grades. The Scope and

Sequence provides an order for skills presentation; however, it provides no implications on revisiting skills. For example, the Program Overview provides an outline that gives a brief overview of the Unit and Topic outlay within the materials. A more detailed Scope and Sequence follows the brief overview that adds details on specific lessons and projects contained in each topic, as well as the Texas Focal Points, TEKS, and ELPS addressed. For example, the Program Overview Guide contains three Scope and Sequence documents. The first contains an outline of the Units and Topics and highlights which topic covers each of the Texas Focal Points. A range of 3–8 Topics covers each of the Texas Focal Points. The second includes a more in-depth document that details the Scope and Sequence of which topics cover which lessons, as well as the specific content and processing TEKS covered in that topic. The third document in the Program Overview Guide defines each of the TEKS and includes all of the specific lessons in which they introduce the TEKS as well as which lessons revisit it. The Scope and Sequence documents do not specifically address how the TEKS build and connect across grade levels.

The materials support teachers in understanding how to use the materials as intended by including a Program Overview Guide, Topic Teacher Guides, and Lesson Teacher Guides. The Program Overview Guide outlines the program, then briefly discusses each component of the program, including core lessons, intervention lessons, and assessments. The Program Overview Guide also provides a rationale for the components of the individual lessons such as the "Prerequisite," "Launch," and "Close and Check" activities. This information supports teachers in understanding why the components exist and work together as a whole. The Topic Teacher Guides support teachers by providing vertically aligned standards (on grade level, looking back, and looking ahead), a "Math Background" section narrating skills and concepts students should pull from their background knowledge to apply to the current content, "Essential and Focus Questions" to frame the topic, and a "Topic Planning Guide" that provides the suggested pacing of lessons within the topic. The Lesson Teacher Guides then provide more specificity for each lesson, supporting the teacher in understanding key concepts of the lesson, how to launch the lesson, guiding questions to help students progress toward proficiency, guidance for English Learners, suggestions for fostering student engagement and differentiating instruction, and understanding author's intent—all critical attributes of the lesson. Lesson 11-3 provides an example of the author's intent when it states: "In the Launch, students interpret a percent in order to find the terms of the underlying ratio. This work prepares students to learn the more formal rules of using percentages in subsequent problems. The Launch introduces a lot of information that students must sort through in order to know what they need to solve the problem."

Additional support for teachers that is also beneficial for students during practice includes the virtual manipulatives in the digital program and the grids and organizers. Teachers can use these tools to model skills and concepts for students. The materials are organized in a way that makes sense for ease of implementation and accessibility. Each topic and lesson has the guides in a side panel, and a stationary tab at the top of the page has the tools readily accessible. For example, the Program Overview provides a "Flexible Implementation Plan," with details on how to implement the materials in a low-technology, medium-technology, and high-technology

setting. The flexible implementation plan provides suggestions on how to assign assessments, homework, and interventions under various scenarios and suggests specific hardware to use in class and at home if possible. For instance, in low-tech environments, it suggests small group pullouts and pencil and paper. For example, teacher implementation videos and resources are provided on the publisher's website with access available from the curriculum. Also, the content is easily navigable, with the starting page broken by grade-level followed by the unit outlay. Once a unit is chosen, it presents topics within the unit, and users can choose topics to view sequenced lessons. It also provides On-Demand training videos. Videos include a "Getting Started" section, which includes a Program Overview; "Teaching an On-Level Lesson"; and "Unit Structure" overview. Also included are videos for progress monitoring, teacher and student support, MathXL, and platform training.

The materials do not provide guidance directed at administrators related to supporting teachers in the implementation of materials nor any support specifically intended for administrators. That being said, it is reasonable to assume that the administrators can use the program overview with an administrator's lens to support teachers.

The materials include lessons and activities for a full year of instruction in a classroom, provided that the school year is equivalent to the traditional 180 days of instruction. The Unit and topic Teacher Guides have realistic pacing guides. For example, Unit A contains four separate topics, and each topic lists the lessons and reviews, along with the allocated time that should be spent on each for singular period and block schedules.

November 2020

Savvas Digits Grade 6

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.

Partially Meets 1/2

Teachers have the autonomy to rearrange concepts as they see fit. The materials are designed to allow easy implementation into a variety of school designs. The materials provide suggested pacing of topics and units based on traditional schedules with 45–50-minute classes or block schedules with 90–120-minute classes. The materials include strategic guidance in how to implement the curriculum to incorporate the developmental progression that naturally occurs in mathematics; however, the materials lack guidance in regards to flexibility of rearranging the placement of units and instead depend on teachers to adhere to the scope and sequence to receive the most benefit. The materials are designed for flexibility of implementation, dependent on a school's design concerning technological accessibility and daily schedule structure. They include options for EL small group interventions that can be translated into a full classroom approach. The materials do not address additional structures such as online-only classrooms or multi-grade classrooms.

Evidence includes but is not limited to:

The materials include strategic guidance in how to implement the curriculum to incorporate the developmental progression that naturally occurs in mathematics; however, the materials lack guidance in regards to flexibility of rearranging the placement of units and instead depend on teachers to adhere to the scope and sequence to receive the most benefit. For example, the

“Math Background” section passages provided in the unit, topic, and lesson “Teacher Guides” detail the developmental progression of mathematical concepts between topics and lessons, with direct navigation on how current and upcoming lessons build on previous lessons.

The materials are structured in an order that identifies the developmental progression of the content and skills. It is clear to the user that the content should be taught in a specific order. For example, units are laid out in alphabetical order, and topics are introduced in numerical order, with lessons also listed in numerical order as a subset of each topic. There is no guidance on how to rearrange the order of units within the curriculum. For example, the Teacher Guide for each unit identifies the prerequisite TEKS included within the prerequisite assessment for each unit. Except for a few TEKS (6.3D & 6.8D), all TEKS included as prerequisites are from previous grade levels. This sequence indicates that units (except for Unit A) could be taught in a different order without disrupting the content of other units. However, there is no guidance for the reorder of units within the materials.

The materials are designed to allow easy implementation into a variety of school designs. The materials provide suggested pacing of topics and units based on traditional schedules with 45–50-minute classes or block schedules with 90–120-minute classes.

The materials provide support for LEAs to consider how to incorporate the materials into a variety of school designs. For example, the materials provide a detailed “Flexible Implementation Plan,” with recommendations based on the school’s technology capabilities. Suggestions for lesson presentation, assessment, homework, intervention, and planning are based on three categories, Low Tech, Mid Tech, and High Tech. Low tech includes online presentations, paper-based assessments, and homework; teacher-selected interventions completed whole group or Title 1 pull-out; and printed TE. Mid tech includes online presentations, online prerequisite assessments, paper-based unit assessments, online homework, printed homework helpers as a backup, teacher-selected interventions completed whole group or Title 1 pull-out, and online teacher guides, with printed program overview. High tech includes all assessments and homework completed online, teacher-selected interventions online with individualized study plans, teachers use the dash and the digits mobile app. For example, the materials provide a detailed implementation plan regarding pacing dependent upon the structure of the school day. The unit Teacher Guides pace out each topic based on a traditional schedule versus a block schedule.

The materials are designed for flexibility of implementation, dependent on a school’s design concerning technological accessibility and daily schedule structure, and include options for EL small group interventions that can be translated into a full classroom approach. The materials do not address multi-grade classroom implementation or co-teaching. For example, the “Program Overview” provides guidance based on low, medium, and high technology capabilities with specific suggestions on how to approach various parts of a lesson. The unit overviews provide pacing suggestions for both singular period and block schedules. For example, the lesson teacher guides provide guidance on implementing small group structures

for specific lesson parts, organized by EL beginning, intermediate, advanced, and advanced high groupings. The suggested small group interventions can flexibly be translated to general learning needs within the classroom.

November 2020	Savvas Digits Grade 6

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.

Partially Meets 1/2

Other than the inclusion of an informational letter to parents and suggestions in "Enrichment Activities" for students to present to families, the materials lack resources to encourage the development of strong relationships between teachers and families. The parent letter, supplied in both English and Spanish, provides a general overview of the program. The letter gives parents details and assistance accessing the online materials, as well as explaining that homework, lessons, and progress monitoring can be done online. Given that the program is primarily digital with supporting print material, there is an abundance of online access to resources for parents to work with their children on specific skills. Additionally, the materials provide a multilingual glossary that provides terms with visual and verbal examples in 11 different languages. However, the material as a whole is not available in any language other than English. The materials do not provide guidance that outlines any activities specifically designed for use at home to create a school/home relationship.

Evidence includes but is not limited to:

The materials lack information and resources to encourage the development of strong relationships between teachers and families. Teachers can send a parent letter describing the program, how students will interact with the program, and how teachers will monitor students' progress. The parent letters are available in English and Spanish to help ensure parent understanding of accessing the program from home. The letters provided give an overview of getting started with the ACTIVe-book, which allows students to interact with the curriculum, as well as a letter explaining how to get started with the digital program, which contains all the course content. Because this curriculum is available in a fully digital format, students can access the content at school with teachers and at home with parents. They can access homework assignments completed at home through this digital curriculum. The materials do not provide any guidance that outlines any activities specifically designed for use at home to create a

school/home relationship. The materials also include Enrichment Activities that often suggest students present results to their families, such as in the Enrichment Activity for Topic 11, in which students upcycle plastic bottles by designing and building an indoor planter from them, then present the planter and a project checklist to a friend or family member. Activities such as this one encourage a school-family connection but do not necessarily aid in the development of a strong teacher-family relationship. In another example, the Enrichment Activity for Topic 12 directs the student to review their completed project with a family member or friend with specific guiding questions to ask, such as, "Does your playground look fun for children?" After the student revises the project based on feedback, the materials direct them to evaluate their project based on the project checklist with a friend or family member.

While there is guidance to support English Learners, guided by the English Language Proficiency Standards (ELPS) and a "Multilingual Handbook," the material as a whole is not available in any language other than English. The materials provide appropriate suggestions or resources for home activities that support the curriculum and that families can easily use through its Enrichment Activities. The materials include online access to the resources for parents to work with their children on specific skills. The materials contain parent letters with instructions on accessing resources, along with a troubleshooting checklist and a link for technical support. The online materials accessible to parents and students from home provide quick access in the toolbar to vocabulary within that lesson in both English and Spanish, along with examples in both languages for the vocabulary terms. Additionally, the materials include a multilingual glossary that provides terms with visual and verbal examples in 11 different languages. Outside of the student task of reviewing work with family on Enrichment Activities, there are no suggested home activities provided to parents regarding skill acquisition.

November 2020

Savvas Digits Grade 6

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 in 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 in both the digital platform and printable student companion sheets. The materials support student learning by providing graphics that are large and clear with sufficient white space, making it less distracting. Students can minimize graphics and text on the digital platform, giving them more room to work out problems. The teacher's guides are designed with clear, designated places for important information such as aligned TEKS and pacing structures and include instructional support information clearly stated and easily identified on the pages and aids in planning and implementing lessons. The teacher guides are easily navigable, and important information is easy to find, particularly due to the consistency of "Lesson Teacher Guides," "Topic Teacher Guides," and "Unit Teacher Guides." The "Program Overview Guide" thoroughly assists teachers in getting started with using the materials and understanding the purpose of each lesson piece. Moreover, the Teacher Guides are consistent and use the same format across the curriculum. Additionally, the materials include readable, relevant, and recognizable pictures, videos, and graphics that support student learning.

Evidence includes but is not limited to:

The materials include appropriate use of white space and design that supports and does not distract from student learning in both the digital platform and printable student companion sheets. The teacher's guides are designed with clear, designated places for important information such as aligned TEKS, pacing structures, essential questions, guided support for English Learners, and more. The teacher's guides also include instructional support information

clearly stated and easily identified on the pages and aids in planning and implementing lessons. For example, the Teacher's Guides include sections such as "Author Intent," "Fostering Student Engagement," and "Close and Check" to clarify and ensure the demonstration of key concept understandings. The Program Overview thoroughly assists teachers in getting started with using the materials and understanding the purpose of each lesson piece. Moreover, the Teacher Guides are consistent and use the same format across the curriculum. For example, the Unit Teacher Guides provide topic outlines and pacing details for each topic, as well as essential questions; vocabulary; and background information regarding previous, current, and future learning encompassed in the unit. For example, individual Lesson Teacher Guides open with the "In-Class Notes," which include guiding questions for each section of the lesson. This is followed by the "Preparation Notes" that include relevant lesson information listed under bolded headings such as Texas Essential Knowledge and Skills and English Language Proficiency Standards.

The materials include readable, relevant, and recognizable pictures, videos, and graphics that support student learning. For example, the topic openers and launches include clear animations and videos, and each lesson piece has large, clear text and graphics, including the "Student Companions" that have easily identifiable pictures and graphics in some questions. For example, the digital math tools contain a simple graphic along with the text to help students identify the appropriate tool to use. The publisher uses clear, easy-to-read fonts. Pictures in the lesson and on assignments do not distract from the text on the page or interfere with learning, as there is no clutter and all associated pictures are clearly associated with their lesson part or practice problem. The tables and charts are also clear and easy to read.

November 2020

Savvas Digits Grade 6

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 entire program is digitally based. All student and teacher activities are designed to be delivered in a technology platform, yet users can print them if needed. With technology integration, data and reports are easily accessed, and assignments are quickly assigned to students.

Evidence includes but is not limited to:

The materials reviewed are technologically based, with supplemental print material. Therefore, technology is not only present but is the foundation of the program. Thus, it aligns with the curriculum's scope and approach to mathematics skill progression. The components include:

- Unit, topic, and lesson guides for teachers
- All assessments, both formative and summative, for students (prerequisite, unit, topic, etc.)
- Homework assignments
- Guided practice lessons
- Enrichment activities
- Tools (such as virtual manipulatives, graphic organizers, and a glossary) for instructional support
- Editable lesson plans for teachers

All of these components (and others not mentioned) support the materials' progression of math content and skills introduction and practice.

The materials are designed for access on a digital platform and therefore, the entire curriculum and all activities are accessible through technology with the option of transitioning to paper-based if needed. The materials provide personalized digital lessons for students based on learning level and give feedback on progress while offering students the ability to complete school work from home if they have a computer/device with Internet access. The technological components of the materials align with the scope and sequence since the entire curriculum is designed to be accessed on a digital platform. Each lesson has specific guidance on how to utilize each digital piece of the lessons. Considering the materials are designed to be fully accessed digitally, the technological components support the materials' progression of math content and skills introduction and practice through daily interactive lessons. For example, each lesson includes a "Launch" video and then two to four practice activities for completion as individuals or as a whole group. Students can digitally complete each lesson practice, homework, review work, and test/quiz.

The materials contain digital features to enhance classroom learning without replacing or detracting from it. The digital "Student Edition" of the math book is age-appropriate for sixth- to eighth-grade students. Students' individual homepages have navigation buttons for digital copies of the student text, tutorial videos, and online skills practice. For example, the student edition contains a skills practice page where students may go to practice and receive feedback on converting between fractions, decimals, and percentages. The technology promotes and enhances student participation in materials through the use of engaging videos and activities. For example, each lesson contains videos and problem-solving tips by youthful individuals that are relatable to a diverse group of students. The technology of the lessons allows students to work through the entire lesson along with the teacher. Many lessons have drag and drop activities for students to help enhance student participation in the lesson.

The materials provide support for teachers to integrate technology successfully. The teacher guide has a sidebar within lessons that references available technologies to enhance the lesson. The materials contain a letter supporting families in working on the student edition outside of the classroom for extra support. Many of the topic introductions and practice problems have engaging videos and graphics to present scenarios. The program overview and teacher guides give teachers a thorough understanding of how to integrate the technological components in the lesson structure. For example, the program overview gives a high-level explanation of how to utilize teacher guides in the lessons and provides a table describing the various assessments and which assessments the online grading system can auto-grade. The teacher guides often direct teachers to utilize their whiteboard with the digital platform, along with how to incorporate student involvement in these activities. The materials include teacher training videos to assist teachers in understanding the technology of the curriculum, as well as information on how to contact Tech Support if an issue arises. For example, the training website features "On-Demand" training videos specific to the curriculum. Videos include training for the Program Overview, "Unit Structure," and "Teaching an On-Level Lesson." There are also links to videos for connecting with the "Teaching Support" panel and "Support for Students."