# **McGraw Hill Texas Science Grade 7 Executive Summary**

# Section 1. Science-Related 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. Instructional Anchor**

- The materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.
- The materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

#### **Section 3. Knowledge Coherence**

- The materials are designed to build knowledge systematically, coherently, and accurately.
- The materials provide educative components to support teachers' content and coherence knowledge.

# **Section 4. Productive Struggle**

• The materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

# Section 5. Evidence-Based Reasoning and Communicating

- The materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.
- The materials provide teacher guidance to support student reasoning and communication skills.

#### **Section 6. Progress Monitoring**

- The materials include a variety of TEKS-aligned and developmentally appropriate assessment tools.
- The materials include guidance that explains how to analyze and respond to data from assessment tools.

• The assessments are clear and easy to understand.

#### **Section 7. Supports for All Learners**

- The materials provide guidance on fostering connections between home and school.
- The materials include listening, reading, writing, and speaking supports to help Emergent Bilinguals meet grade-level science content expectations.
- The materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.
- The materials include guidance, scaffolds, supports, and extensions that maximize student learning potential.

#### **Section 8. Implementation Supports**

- The materials include year-long plans with practice and review opportunities that support instruction.
- The materials include classroom implementation support for teachers and administrators.
- The materials provide some implementation guidance to meet variability in program design and scheduling.

#### **Section 9. Design Features**

- The visual design of materials is clear and easy to understand.
- The materials are intentionally designed to engage and support student learning with the integration of digital technology.
- The digital technology or online components are developmentally and grade-level appropriate and provide support for learning.

#### Section 10. Additional Information

• The publisher submitted the technology, price, professional learning, and additional language supports.

#### **Indicator 2.1**

Materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.

1	Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS.	М
2	Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes.	М
3	Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.	М
4	Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions and plan and conduct classroom, laboratory, and field investigations and to engage in problem-solving to make connections across disciplines and develop an understanding of science concepts.	М

# Meets | Score 4/4

The materials meet the criteria for this indicator. Materials are designed to strategically and systematically integrate scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.

Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS. Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes. Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS. Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions and plan and conduct classroom, laboratory, and field investigations and to engage in problem-solving to make connections across disciplines and develop an understanding of science concepts.

Evidence includes but is not limited to:

Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade level appropriate scientific and engineering practices as outlined in the TEKS.

- Materials provide multiple opportunities for students to demonstrate mastery of the grade-level appropriate scientific and engineering practices. For example, students practice scientific and engineering practices within each lesson through the Explain portion of the 5E lesson model. In Lesson 1.1, Quick Launch lab investigation for Grade 7, students think "about the differences between elements and compounds; compare and contrast the design they make using the materials; and recognize that each element is unique, just as each object is unique, and that elements combine in compounds, just as objects combine to make something new."
- Within 5E lessons, teacher guidance materials explain flexible lab-style options that can be used at varying student-readiness levels. For example, the same Explore lab has instructions for a Quick Lab, Open Inquiry, or Guided Inquiry version. In Chapter 2, Lesson 2.2, the versions of

- Explore Lab: Distinguish Between Speed and Velocity have students collecting, graphing, and analyzing their own data. Both Inquiry options allow students to design their own investigation.
- Materials provide the opportunity for students to practice their knowledge of grade-level appropriate Scientific and Engineering Practices and Recurring Themes and Concepts through Explore Simulations and Labs, Making Connections questions, and STEM Connections. Materials provide students the opportunity to demonstrate mastery of grade-level appropriate Scientific and Engineering Practices and Recurring Themes and Concepts through an end-of-chapter Show What You Know activity where they plan and conduct their own investigation over chapter content.

Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes.

- A table is provided at the beginning of each chapter in the Teacher's eBook with the Recurring Themes and Concepts presented in the chapter and in which lesson(s) they can be found. The Recurring Themes and Concepts are provided within the Target Vocabulary on The Science Language and Content Acquisition page within the Teacher's eBook. The standards are also provided for each lab or demo within the lessons of a chapter and are listed on the Labs and Demos at a Glance page within the Teacher's eBook.
- Materials provide multiple opportunities to make connections between and within overreaching
  concepts using the recurring themes. For example, the "Interactive Word Wall" section allows
  students to make connections between vocabulary and the recurring themes throughout the
  year. In Grade 7, students focus on patterns, cause and effect, scale, proportion, and quantity,
  modeling systems, energy and matter, structure and function, stability, and change within each
  chapter in the interactive student eBook.
- The Teacher's eBook provides references to the Recurring Themes throughout the lessons. For example, in Chapter 3, Lesson 3.1, in the Explore/Explain, Teach section, materials describe how the theme of Energy and Matter is recurring in this lesson.
- Materials include TEKS correlations in grades 6–8, which include specific information about when the recurring themes are referenced and where.

Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.

- Materials strategically develop students' content knowledge and skills based on appropriate
  concepts and grade level. For example, each lesson builds on the previous lesson within each
  chapter. In grade 7, students define elements and compounds before distinguishing between
  chemical and physical changes. This builds on the next lesson by integrating what students
  learned about elements, compounds, chemical changes, and physical changes with the
  properties of solutions and the effects on dissolution in Chapter 1 of the Teacher's eBook.
- Materials systematically develop students' content knowledge and skills based on appropriate
  content and grade level. For example, the TEKS Progression section for each lesson in the
  Teacher's eBook provides a vertical alignment map with the progression of knowledge and skills.
  In grade 7, teachers are given the TEKS progression from grade 6 through high school chemistry
  on "elements and compounds."
- Materials are organized in the 5E model, where students engage with content, explore with a hands-on investigation, explain by finding evidence and understanding, elaborate by applying

- their learning to new contexts, and then evaluate by assessing their understanding. This shows a systematic method for students to develop their content knowledge and skills.
- The labs and demos within a chapter build on the grade-level appropriate content students learn. The labs and demos are basic at the beginning of the lesson. As the lesson builds, students have to incorporate deeper knowledge and thinking to complete the labs. The chapter culminates in students creating and carrying out their own investigations.

Materials include sufficient opportunities, as outlined in the TEKS, for students to ask questions and plan and conduct classroom, laboratory, and field investigations and to engage in problem solving to make connections across disciplines and develop an understanding of science concepts.

- Materials provide opportunities for students to ask questions and plan and conduct
  investigations. For example, students plan and conduct investigations that are provided in the
  TEKS Lab Library: Grade 7. In Lesson SEP 2, students "use engineering practices to design a
  model to solve a given problem, design and test a device using common materials that can move
  a small object a specific distance using air currents, and recognize that criteria and constraints
  affect which solution is selected to solve a particular problem."
- Materials provide opportunities for students to engage in problem-solving to make connections
  across disciplines and develop an understanding of science concepts. For example, students
  make connections with English/Language Arts by completing the CER (claim, evidence, and
  reasoning) sections of each chapter. In grade 7, students use an "Explore Lab" to compare
  elements and compounds in order to create their CER.
- Materials provide repeated opportunities for students to use scientific and engineering practices (SEPs). The "TEKS at a Glance" section of each unit indicates which SEPs are covered in each lesson. Over the course of the grade, students have multiple exposures to each of the SEPs.
- Materials give students sufficient opportunities to plan and conduct classroom investigations. In grade 7, materials provide opportunities for students to plan and carry out investigations in each lesson. For example, within the Elements, Compounds, and Solutions chapter, students examine a picture phenomenon of a bath bomb fizzing. The teacher is given questions in the materials to facilitate students' learning: "What effect might the temperature of the water have on how quickly bubbles form?" "What else could be one to speed up or slow down the formation of bubbles?"

#### **Indicator 2.2**

Materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

1	Materials embed phenomena and problems across lessons to support students in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS.	M
2	Materials intentionally leverage students' prior knowledge and experiences related to	М
	phenomena and engineering problems.	
3	Materials clearly outline for the teacher the scientific concepts and goals behind each	М
3	phenomenon and engineering problem.	

# Meets | Score 4/4

The materials meet the criteria for this indicator. Materials anchor the learning in phenomena and problems as the key lever for driving learning and student mastery of disciplinary knowledge and skills.

Materials embed phenomena and problems across lessons to support students in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade-level content as outlined in the TEKS. Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems. Materials clearly outline for the teacher the scientific concepts and goals behind each phenomenon and engineering problem.

Evidence includes but is not limited to:

Materials embed phenomena and problems across lessons to support students in constructing, building, and developing knowledge through authentic application and performance of scientific and engineering practices, recurring themes and concepts, and grade level content as outlined in the TEKS.

- Materials embed phenomena and problems across lessons to support student learning. For
  example, students show what they know at the end of each chapter's lab investigation. In the
  TEKS Lab Library: Grade 7, students investigate a real-world phenomenon or problem, such as
  "design an experiment to explore the ideal conditions for dissolving a bath fizzy using one
  variable." Students refer to the content within the regular chapter lesson in order to plan and
  investigate the real-world problem.
- The materials use phenomena as a central anchor that drives student learning across grade-level content. Students develop content knowledge as they work to construct explanations of the phenomena and/or solve engineering problems. For example, in Chapter 8, Organisms and Traits, students watch the video "Passing the Traits" and answer the Essential Question, "Why do the birds and their baby have different traits." After the students progress through the lessons in Chapter 8, the materials provide a chapter wrap-up where the beginning question of "Why do the birds and their baby have different traits" is asked again, and the students are prompted to use the knowledge learned in the chapter to answer the question.

- Each chapter opens with a video phenomenon and introduces students to the overarching Essential Question for the chapter. Additional questions connected to the phenomena are woven throughout the lessons within the chapters. Students are given opportunities to investigate those questions and discuss information with peers.
- The lessons within the chapter direct students back to the phenomena video at the beginning of
  the chapter and ask additional questions about the phenomena based on newly learned
  information. Students see a green lightbulb with a question mark in it each time they are
  directed back. There is a hyperlink included that will take them back to the video so they don't
  have to navigate themselves.

Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems.

- Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems. For example, each chapter includes a "Page Keely Science Probe" connected to the phenomena and chapter content that allows students to activate their prior knowledge and experience. In grade 7, students are given the scenario, "Patrick poured himself a glass of water. He wondered if he was drinking a compound or an element. He decided to text his friends." Students read through the text conversation and answer the prompt, "Who do you think has the best idea? Explain your thinking."
- Materials intentionally leverage students' prior knowledge and experiences related to phenomena and engineering problems. For example, teachers connect students' prior vocabulary and knowledge found within each chapter's overview section. The Teacher's eBook gives the TEKS progression and guides teachers to "use this information to review what your students have already learned and to help guide their learning as they progress in the development of their scientific knowledge. If students need support on the prior TEKS or background knowledge, refer to your TEKS refresh or assign LearnSmart review assignments."
- The materials provide guidance for teachers to adequately address potential areas of
  misunderstanding. The Teacher's eBook includes a section in the Chapter Launch called
  "Identifying Misconceptions." This explains common misconceptions to be addressed in each
  lesson.

Materials clearly outline for the teacher the scientific concepts and goals behind each phenomenon and engineering problem.

- Materials clearly outline for the teacher the scientific concepts and goals behind each
  phenomenon and engineering problem. For example, the Teacher eBook provides a "Chapter
  Overview" section that explains the essential questions and overarching learning goals. Within
  each lesson, there is also a "Science Background" section that provides guidance on concepts
  and connects them back to the big idea of the chapter.
- The materials clearly outline the student learning goal(s) behind each phenomenon or
  engineering problem. For example, the Teacher's eBook provides a Lesson Overview for each
  lesson that includes the Essential Question and Lesson Objective. For example, in Lesson 2.2 on
  Speed and Velocity, the lesson objective is "Students distinguish between speed and velocity
  using distance, displacement, and direction."
- The materials clearly outline the student learning goal(s) behind each phenomenon or engineering problem. For example, the materials provide a lesson overview for each lesson

within a chapter. The lesson overview provides the lesson objective. Also provided is a "connect to the big idea," which explains how the objective relates to the chapter's phenomenon.

• TEKS are provided in the pacing guide in the resources section of teacher materials. They are also provided at the beginning of each chapter within the "TEKS at a Glance" page.

#### **Indicator 3.1**

Materials are designed to build knowledge systematically, coherently, and accurately.

1	Materials are vertically aligned and designed for students to build and connect their	М
+	Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels.	
2	Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding.	М
-	increasingly deeper conceptual understanding.	
3	Materials clearly and accurately present grade-level-specific core concepts, recurring themes	М
3	and concepts, and science and engineering practices.	
	Mastery requirements of the materials are within the boundaries of the main concepts of the	М
4	grade level.	

# Meets | Score 6/6

The materials meet the criteria for this indicator. Materials are designed to build knowledge systematically, coherently, and accurately.

Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels. Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding. Materials clearly and accurately present grade-level-specific core concepts, recurring themes and concepts, and science and engineering practices. Mastery requirements of the materials are within the boundaries of the main concepts of the grade level.

Evidence includes but is not limited to:

Materials are vertically aligned and designed for students to build and connect their knowledge and skills within and across units and grade levels.

- Materials are vertically aligned for students to build and connect their knowledge and skills
  within and across units. Each chapter overview contains the "big idea" section, which explains
  how each lesson connects to the big idea of the chapter. For example, in Grade 7 of the Teacher
  eBook, the big idea of Chapter 2 is, "force and motion have a cause and effect relationship."
- Materials are vertically aligned for students to build and connect their knowledge and skills
  within and across grade levels. Each lesson includes a TEKS Progression section that reviews
  what students have learned and elaborates on how later grade levels will expand on the
  concept. For example, in the Teacher eBook, Grade 7, students build on Grades 5 and 6 by
  "comparing and contrasting elements and compounds in terms of atoms and molecules,
  chemical symbols, and chemical formulas."
- Materials are vertically aligned for students to build and connect their knowledge and skills
  within and across grade levels. The vertical alignment of TEKS for 4th grade to 8th grade is
  provided at the beginning of every lesson in the "Lesson Overview" in the Teacher eBook.

Materials are intentionally sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding.

- Materials are intentionally sequenced to scaffold learning that allows for increasingly deeper conceptual understanding. Lessons direct teachers and students to create an Interactive Word Wall at the beginning of each lesson. As students progress through the lesson activities, they revisit and add to their Interactive Word Wall to build deeper understanding.
- Materials are intentionally sequenced to scaffold learning that allows for increasingly deeper conceptual understanding. Each lesson provides a 5E outline that begins with a concrete understanding of the content, followed by hands-on learning opportunities, and concludes with an application and explanation. For example, In Grade 7, Chapter 3 on "Thermal Energy In Systems," students engage with the lesson through a quick launch activity. Students build on their understanding by exploring and explaining via a lab investigation. Students conclude their learning by elaborating on what they've learned throughout the lesson by using their knowledge to plan a real-world investigation.
- Materials are intentionally sequenced to scaffold learning that allows for increasingly deeper conceptual understanding. For example, each chapter's lab investigations listed under the "TEKS Lab Library" contains a "Quick launch" for each lesson that follows with an "Explore Lab." Students build on their basic concrete knowledge of the content by demonstrating a hands-on investigation. The chapter concludes with a "Show What You Know" lab investigation. This provides students with an opportunity to display their abstract/conceptual knowledge of the content.
- Materials are intentionally sequenced so students experience a phenomenon before completing
  an Explore Lab or Model for reasoning to allow increasingly deeper conceptual understanding.
  For example, Lesson 4.2's phenomenon shows a video comparing the relative size of objects in
  our solar system. The Explore Lab then has students create their scale to model the distances
  between objects in the solar system. Finally, they are asked to reflect on their work and
  determine a way to make it more accurate.
- The materials sequence instruction so that prior knowledge is activated before explicit teaching occurs. This allows for an increasingly deeper conceptual understanding. For example, a lesson on Speed and Velocity in grade 7 begins with a Quick Launch where they determine how the speed of an object relates to the distance it travels in a given amount of time. Then the students preview a video, Speeding Away. This sparks the student's curiosity by observing how the objects they examined in the quick launch are made in the video. Students then complete the hands-on activity by exploring and investigating motion.

Materials clearly and accurately present grade level specific core concepts, recurring themes and concepts, and science and engineering practices.

- Materials clearly and accurately present grade-level-specific core concepts. For example, each
  grade level's materials contain a "TEKS Correlation" guide that shows the correlation between
  the materials to the TEKS. Each chapter also has a "TEKS at a Glance" page that shows
  correlations within the chapter.
- The materials accurately present core concepts, recurring themes and concepts, and
  engineering practices. Across lessons, units, and grade levels, materials are free from science
  inaccuracies. Materials present scientific content that is current and widely accepted
  explanations. For example, grade 7 student materials present accurate information about body

- systems, including how organs work together with other organs and that they are part of an organ system. Materials also include that this could be a common misconception because students can think that organs work independently.
- Materials clearly and accurately present recurring themes and concepts and scientific and
  engineering practices. Each chapter contains a "Chapter Vocabulary" section that lists the prior
  knowledge terms, lesson vocabulary, supporting vocabulary, scientific and engineering
  practices, and recurring themes. For example, in Chapter 1 of Grade 7, students "engage in
  argumentation and ask questions" (page 32, Teacher eBook). The theme for this chapter is
  centered around "structure and function" (page 32, Teacher eBook).
- Materials clearly and accurately present recurring themes and concepts. Recurring Themes and Concepts are laid out at the beginning of each chapter on the TEKS at a Glance page of the Teacher eBook.
- The Teacher eBook of materials clearly and accurately presents science and engineering practices. Scientific and Engineering Practices are laid out at the beginning of each chapter on the TEKS at a Glance.

Mastery requirements of the materials are within the boundaries of the main concepts of the grade level.

- Mastery requirements of the materials are within the boundaries of the main concepts of the
  grade level. For example, the verbiage used in the TEKS is directly aligned with the "Chapter
  Test." In Grade 7, the TEKS verbiage states that students should be able to compare and
  contrast. In the "Chapter Test: Chapter 1" under Chapter 1: Chapter Wrap-up and Assessment,
  question 5 asks students to determine which statement is true regarding comparing and
  contrasting two elements.
- Mastery requirements of the materials are within the boundaries of the main concepts of the
  grade level. Teacher materials provide a Chapter Overview which indicates the Big Idea in the
  chapter. Lessons also have essential questions indicating the main concepts that should be
  obtained. For example, Chapter 2's Big Idea is that "force and motion have a cause-and-effect
  relationship."
- The materials clearly define the boundaries of content that students must master for the grade level. For example, in grade 7, chapter 9, lesson 1, the TEKS progression states, "In grade 5, students analyzed the structures and functions of different species to identify how organisms survive in the same environment. 5.13B In grade 6, they identified and compared the basic characteristics of organisms 6.13B. In this lesson, students expand on this knowledge to understand how systems are organized and function to support the health of an organism by identifying and modeling the main functions of the systems of the human organism."

#### **Indicator 3.2**

Materials provide educative components to support teachers' content and knowledge coherence.

1	Materials support teachers in understanding the horizontal and vertical alignment guiding the development of grade-level content, recurring themes and concepts, and scientific and engineering practices.	M
2	Materials contain explanations and examples of science concepts, including grade-level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS.	M
3	Materials explain the intent and purpose of the instructional design of the program.	М

# Meets | Score 6/6

The materials meet the criteria for this indicator. Materials provide educative components to support teachers' content and knowledge coherence.

Materials provide support for teachers in understanding the horizontal and vertical alignment guiding the development of grade-level content, recurring themes and concepts, and scientific and engineering practices. Materials contain explanations and examples of science concepts, including grade-level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS. Materials explain the intent and purpose of the instructional design of the program.

Evidence includes but is not limited to:

Materials support teachers in understanding the horizontal and vertical alignment guiding the development of grade level content, recurring themes and concepts, and scientific and engineering practices.

- Materials support teachers in understanding the horizontal and vertical alignment guiding the
  development of grade-level content. For example, each chapter provides the teacher with a
  "TEKS Progression" section that explains what students have learned and will learn.
- The materials include guiding documents that explain how content and concepts increase in depth and complexity across lessons and units within the grade level. For example, every lesson begins with a Lesson Overview that provides the vertical and horizontal alignment of the gradelevel content. This supports teachers in understanding how new learning in a unit connects to previous learning and future learning goals.
- Materials provide support for teachers in understanding the horizontal and vertical alignment, guiding the development of recurring themes and concepts and scientific and engineering practices. For example, the Teacher eBook TEKS at a Glance shows the horizontal alignment of the Recurring Themes and Concepts and Scientific and Engineering Practices Teacher eBook TEKS at a Glance shows the horizontal alignment of the Recurring Themes and Concepts and Scientific and Engineering Practices. A Science Vertical and Horizontal Alignment document is provided. This supports teachers in understanding the horizontal and vertical alignment guiding

the development of grade-level content, recurring themes and concepts, and scientific and engineering practices.

Materials contain explanations and examples of science concepts, including grade level misconceptions to support the teacher's subject knowledge and recognition of barriers to student conceptual development as outlined in the TEKS.

- Materials contain explanations and examples of science concepts, including misconceptions to support the teacher's subject knowledge and recognition of barriers to students' conceptual development. For example, in the teacher eBook, each chapter has an "Identifying Misconceptions" section. In grade 7, Chapter 9: Human Body Systems, the materials state, "The following common misconceptions will be addressed in detail at points of use in the lessons. Lesson 1- Each organ works separately from other organs; organs are not part of an organ system. Lesson 2- Bones are not made up of cells, and bones are not living."
- Materials contain explanations and examples of science concepts to support the teacher's subject knowledge and recognition of barriers to students' conceptual development. For example, in the teacher eBook, each chapter has a "Science Background" section. This section provides in-depth knowledge of the science concepts.
- Materials support teachers' subject knowledge by providing background information. For example, the "Chapter Overview" provides explanations for the Essential Questions. The Lesson Overview provides additional information for each lesson.

#### Materials explain the intent and purpose of the instructional design of the program.

- Materials explain the intent and purpose of the instructional design of the program. For
  example, the Program Overview states the goal of the program- "Powered by the spirit of
  inquiry, they [students] will build deep understanding, improve reading and writing skills, pave
  the way for TEKS mastery, and establish a lifelong love of learning."
- Materials explain the intent and purpose of the instructional design of the program. For
  example, "Supporting All Learners: Equity and Access in Science" contains information and
  explanations for the 5E lesson format. It states, .".. the Instructional Model uses the 5E model
  and provides a routine for students to engage with phenomena, gather evidence, connect with
  science content in authentic ways, and show understanding. The Daily Lesson Plan provides
  structure to each day's instruction."
- Materials explain the intent and purpose of the instructional design of the program. For
  example, the Program Overview provides a rationale for using Interactive Word Walls within
  each lesson. These allow students to "build meaningful relationships with TEKS concepts, rather
  than simply memorizing them."

#### **Indicator 4.1**

Materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

1	Materials consistently support students' meaningful sensemaking through reading, writing,	М
1	thinking, and acting as scientists and engineers.	
2	Materials provide multiple opportunities for students to engage with grade-level appropriate	М
2	scientific texts to gather evidence and develop an understanding of concepts.	
	Materials provide multiple opportunities for students to engage in various written and	М
3	graphic modes of communication to support students in developing and displaying an	
	understanding of scientific concepts.	
	Materials support students to act as scientists and engineers who can learn from engaging in	М
4	phenomena and engineering design processes, make sense of concepts, and productively	
	struggle.	

# Meets | Score 4/4

The materials meet the criteria for this indicator. Materials provide opportunities for students to engage in productive struggle through sensemaking that involves reading, writing, thinking, and acting as scientists and engineers.

Materials consistently support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers. Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop understanding of concepts. Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support students in developing and displaying understanding of scientific concepts. Materials support students to act as scientists and engineers who can learn from engaging in phenomena and engineering design processes, make sense of concepts, and productively struggle.

Evidence includes but is not limited to:

Materials consistently support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers.

- Materials consistently support students' meaningful sensemaking through reading and writing opportunities. For example, each lesson provides students with the opportunity to read and think through a guiding question. Then, students write their reflections in their journals or the answer box provided. In Grade 7, students read through a "Elements and Compounds" section. Then, students infer, "What is the difference between the two images of groupings of atoms?" (page 21, Student eBook).
- Materials consistently support students' meaningful sensemaking through thinking and acting as
  scientists. For example, each lab investigation provides students with opportunities to think
  through a guiding question and conduct the investigation as a scientist. In Grade 7, students are
  given a "Show What You Know: Dissolving Decisions" investigation where they "design an
  experiment to explore the ideal conditions for dissolving a bath fizzy using one variable (page
  52, TEKS Lab Library: Grade 7).

Materials consistently support students' meaningful sensemaking. For example, in Lesson 3.2, students explore various methods to melt an ice cube (Quick Launch: Ice Race). After watching a similar video clip of a thermal image of hot coffee being poured into a mug and discussing, students investigate in small groups methods of thermal energy transfer, including conduction, convection, and radiation. (Explore Lab: Investigate Thermal Energy Transfer)

Materials provide multiple opportunities for students to engage with grade level appropriate scientific texts to gather evidence and develop an understanding of concepts.

- Materials provide multiple opportunities for students to engage with grade-level appropriate
  scientific texts to gather evidence and develop an understanding of concepts. For example, each
  chapter contains texts aligned with the TEKS. Students then gather evidence in the reflection
  section to develop a deeper understanding of the content.
- Materials provide multiple opportunities for students to engage with grade-level appropriate
  scientific texts to gather evidence and develop an understanding of concepts. For example, each
  chapter contains a "Page Keeley Probe" and "Texas Spotlight" for students to develop deeper
  understandings by building content connections.
- The materials provide opportunities for students to engage with grade-level appropriate texts. In Lesson 5.1, after modeling seafloor spreading, ocean crust formation, and magnetic reversals (Explore Lab: Investigate Seafloor Spreading), students read about continental drift in their Student eBook. The text includes evidence that continents move (such as maps and landforms) and an explanation of the Continental Drift Hypothesis. Students are prompted to examine the evidence within the text and infer how two mountains are evidence of moving continents.
- The materials provide opportunities for students to engage with scientific texts. Before each Explain text section, a list of key vocabulary is found in the Interactive Word Wall section. Vocabulary is hyperlinked to a glossary. Students add to their Interactive Word Wall as they progress through the lesson.
- The materials provide multiple opportunities for students to engage with scientific texts to gather evidence and develop an understanding of concepts. For example, in grade 7, within a unit on matter and energy in ecosystems, there is a section called "Texas Spotlight" where students read about restoring Lacava Bay. Materials provide students with prompts to make connections. The students are asked to examine a map that shows the watershed of the Mississippi River and asks students to describe how microplastics are getting into the ocean.

Materials provide multiple opportunities for students to engage in various written and graphic modes of communication to support students in developing and displaying an understanding of scientific concepts.

- Materials provide multiple opportunities for students to engage in various written and graphic
  modes of communication. For example, each lesson provides students with opportunities to
  read and think through a guiding question. Then, students write their reflections in their
  journals or the answer box provided. In Grade 7, students read through a "Elements and
  Compounds" section. Then, students infer, "What is the difference between the two images of
  groupings of atoms?" (page 21, Student eBook).
- Materials provide multiple opportunities for students to engage in various written and graphic modes of communication. For example, each lesson provides students with opportunities to

- write and reflect using words or graphics/visuals in the "Apply It" sections. In Grade 7, students examine a model and compare and contrast it.
- Materials provide multiple opportunities for students to communicate their thinking in written and graphic modes. In Lesson 4.3 for Grade 7, students reflect on why organisms need certain conditions for life in the Quick Launch. On page 86, under Habitable Zone, students analyze a diagram of space and mark on the diagram the area that receives the least amount of energy from the sun. Under Apply It, students demonstrate their understanding of the material by using data to explain why Venus is so hot. Further in the lesson, they predict what Europa would need to support life.
- Materials provide multiple opportunities for students to communicate their thinking in written
  and graphic modes. Within lessons, students are prompted to create a CER linked to the topic.
  For example, in Lesson 6.1, during the Explore Lab, students are instructed to make a claim and
  collect evidence on pollutants seeping into the ground. After reading some text, students add
  reasoning to their CER.
- The materials provide opportunities for students to communicate thinking on scientific concepts in written and graphic modes. For example, in the Evaluate phase of a lesson, students reflect on what they have learned and respond to the essential question from the beginning of the lesson.
- Materials provide multiple opportunities for students to engage in various written and graphic
  modes of communication to support students in developing and displaying an understanding of
  scientific concepts. For example, at various points in the lessons, students create a foldable to
  organize their thoughts and information.

Materials support students to act as scientists and engineers who can learn from engaging in phenomena and engineering design processes, make sense of concepts, and productively struggle.

- The materials support students to act as scientists and engineers through their development of lab investigations. For example, in Lesson 3.2, Explore Lab: Investigate Thermal Energy Transfers, the Open Inquiry option has students plan and conduct an investigation of their design to answer the question, "How can thermal energy transfer between substances?" They are given a set of materials that they may use in their investigation. Students then determine how to represent their data and use it to answer the guiding question.
- Materials support students to act as scientists and engineers who can learn from engaging in
  phenomena and the engineering design processes, make sense of concepts, and productively
  struggle. For example, there is a "Show What You Know" lab at the end of each chapter where
  students use their knowledge gained during the chapter and apply it to a situation. Students are
  acting like scientists and struggling productively while completing the activity.
- Materials support students to act as scientists and engineers who can learn from engaging in
  phenomena and engineering design processes and make sense of concepts. For example, after
  labs, students have to complete a CER stating their claim, providing evidence, and making
  connections as to how the evidence supports the claim.

#### **Indicator 5.1**

Materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.

1	Materials prompt students to use evidence to support their hypotheses and claims.	М
2	Materials include embedded opportunities to develop and utilize scientific vocabulary in	М
	context.	
	Materials integrate argumentation and discourse throughout to support students'	М
3	development of content knowledge and skills as appropriate for the concept and grade level.	
	Materials provide opportunities for students to construct and present developmentally	М
4	appropriate written and verbal arguments that justify explanations to phenomena and/or	
	solutions to problems using evidence acquired from learning experiences.	

# Meets | Score 4/4

The materials meet the criteria for this indicator. Materials promote students' use of evidence to develop, communicate, and evaluate explanations and solutions.

Materials prompt students to use evidence to support their hypotheses and claims. Materials include embedded opportunities to develop and utilize scientific vocabulary in context. Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level. Materials provide opportunities for students to construct and present developmentally appropriate written and/or verbal arguments that justify explanations to phenomena and solutions to problems using evidence acquired from learning experiences.

Evidence includes but is not limited to:

#### Materials prompt students to use evidence to support their hypotheses and claims.

- Student eBook materials direct students to make a claim and collect evidence for a CER in the Explore Labs. Further into the lesson, after some explanation in the text, students are instructed to add reasoning for the evidence.
- Materials prompt students to use evidence to support their hypotheses and claims. For
  example, at the end of the Explore Labs, students are to complete a CER, or Claim, Evidence, and
  Reasoning. Within this activity, students make a claim to the hypothesis (an answer), provide
  evidence collected during the lab, and give their reasoning as to why the evidence provided
  supports their claim.
- Materials prompt students to use evidence to support their hypotheses and claims. For
  example, at the end of each chapter is a Show What You Know Lab where students use their
  newly acquired content knowledge to design their own experiment based on a provided
  problem or question. Students gather evidence during the lab and make a claim as to their
  answer to the problem or question. They then explain how the evidence supports their claim.

Materials include embedded opportunities to develop and utilize scientific vocabulary in context.

- Within the Student eBook, opportunities are provided for students to apply scientific vocabulary. In the text, the Apply It sections ask them to answer a question or questions about the concept. For example, in Lesson 8.1, the Apply It question has students draw and label the levels of organization for an organism of their choosing.
- Students read about the vocabulary within the text of the Student eBook. Throughout the reading, materials provide questions to check their understanding of the concepts. Photographs and videos are also included in the text. At the end of the lessons, students are prompted to use their notes and Interactive Word Wall with vocabulary to answer questions reviewing the concept(s) taught in the lesson.
- Materials include embedded opportunities to develop and utilize scientific vocabulary in context. For example, for each lesson, students are asked to create a foldable from content vocabulary and to expand on that vocabulary in their own words.
- Materials include embedded opportunities to develop and utilize scientific vocabulary in context. For example, throughout the lessons, students brainstorm ideas as well as have partner discussions and small group discussions that encourage the use of scientific vocabulary.

Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level.

- Materials provide opportunities for argumentation and discourse throughout the Student eBook. Students are prompted after reading the text or watching a video clip to discuss their thoughts and/or observations. For example, in Lesson 4.2: Structure of Our Solar System, students explain why they think scientists use kilometers to communicate the distance between the Earth and the Moon.
- Materials provide opportunities for students to engage in argumentation and discourse in Show What You Know labs. In the Teacher Support document under Think About It, prompts are provided to guide teachers through discussing the lab and/or its results. For example, in Chapter 2, Show What You Know: Rollercoaster Motion, after completing their investigation, teachers are prompted to have students discuss how they modeled the boomerang roller coaster cart.

Materials provide opportunities for students to construct and present developmentally appropriate written and verbal arguments that justify explanations to phenomena and/or solutions to problems using evidence acquired from learning experiences.

- Materials provide opportunities for students to justify explanations of phenomena and solutions
  to problems using written and verbal arguments to problems using evidence acquired from
  learning experiences. For example, in Lesson 9.1, while exploring the concept in the Explore
  Simulation: Model the Heart's Function, students make a claim and collect evidence. After
  completing the lab and reading through some text, students revisit their CER by adding
  reasoning for the evidence based on the information they just gathered.
- Materials allow students to construct developmentally appropriate written and verbal arguments justifying explanations. For example, students make justifications at the end of each Show What You Know Lab when they write their Claim, Evidence, and Reasoning chart.

- Materials allow students to construct and present developmentally appropriate verbal arguments justifying explanations. The Teacher Support document for the Show What You Know Labs includes students presenting their solutions to the problem to the class.
- The materials provide criteria for developmentally appropriate arguments to explain a phenomenon or defend a solution to problems using evidence acquired from learning experiences.

#### **Indicator 5.2**

Materials provide teacher guidance to support student reasoning and communication skills.

1	Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking.	М
2	Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context.	М
3	Materials provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims.	М
4	Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.	М

# Meets | Score 4/4

The materials meet the criteria for this indicator. Materials provide teacher guidance to support student reasoning and communication skills.

Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking. Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context. Materials provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims. Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.

Evidence includes but is not limited to:

Materials provide teacher guidance on anticipating student responses and the use of questioning to deepen student thinking.

- Materials provide teacher guidance on anticipating student responses and the use of
  questioning to deepen student thinking. For example, each chapter contains a "Misconceptions"
  section that anticipates student misconceptions and guides teachers in correcting those
  misconceptions.
- Materials provide teacher guidance on anticipating student responses and the use of
  questioning to deepen student thinking. For example, each lesson contains open-ended
  question prompts for students to answer in a range of scenarios (independently, partner, small
  group) in their journals.
- Materials provide teacher guidance on anticipating student responses and the use of
  questioning to deepen student thinking. Teacher eBook materials provide teachers with possible
  student responses to questions. For example, in Lesson 4.1, the Chapter Launch section contains
  the question, "What keeps objects moving in specific paths?" The sample answer given is
  gravity.
- The materials provide teacher responses to possible students' responses, including how to build
  on students' thinking. For example, in grade 7, students study tectonic plates. Materials provide
  teacher background information and direct the teacher to ask students, "What is the continental

shelf? Why is it significant to show the continental shelf on a map?" Materials also give the teacher possible student responses. Materials guide the teacher to have students analyze four different explanations of what a plate is. The students analyze four different answer choices and have to choose which one is the best idea. Materials provide guidance for anticipating incorrect and correct responses from students. Materials state what the best answer is and also guide teachers in identifying misconceptions and why the other answer choices are wrong.

Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context.

- Materials include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context. For example, each chapter contains a "word lab" option for teachers to assign for students to observe, examine, and practice lesson vocabulary.
- Materials include an Interactive Word Wall organizer with vocabulary to include in it for each lesson. These provide students with multiple opportunities to be exposed to vocabulary concepts. Throughout the lesson, students are prompted to add to, go back to, or reference the Interactive Word Wall.
- The materials provide embedded support for the teacher in how to introduce and scaffold students' development of scientific vocabulary. For example, materials provide teachers with a unit overview that previews the vocabulary. In grade 7, the plate tectonic maps materials give teachers a preview of vocabulary for the unit. Materials identify the terms continental drift, fossil, superposition, plate-tectonics, seafloor spreading, mid-ocean ridge, magnetic reversal, asthenosphere, and lithosphere as most important for students to understand in order to grasp key ideas in the unit. Materials highlight weathering, deposition, erosion, sediment, landform, earthquake, volcano, and fossil as terms that are useful during the unit, but students have prior knowledge of these terms.

Materials provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims.

- Materials provide teacher guidance on preparing for student discourse. For example, each chapter contains ample opportunities for students to interact with one another in communicating ideas and conclusions. In Grade 7, students discuss a question about Bath Fizzies with a partner in Chapter 1: Elements, Compounds, and Solutions.
- Materials provide teacher guidance on supporting students in using evidence to construct
  written and verbal claims. For example, each chapter contains CER sections. Each chapter has
  students create their Claim and Evidence after their initial readings. Then, students revisit their
  claim and evidence in order to add their reasoning at the conclusion of the chapter.
- Within the Teacher eBook materials, teacher questions are provided to support student discourse. Question prompts are included with correct answers throughout the lesson.
- Teacher eBook materials provide Conversation Starters sections to provide teacher support for student discourse. For example, in Lesson 1.1, this section can be found under Instructional Options in Explore/Explain.
- The materials provide teacher support to prepare for student discourse. For example, materials include teacher preparation by setting up and reinforcing a class culture in which students listen to and evaluate whether they agree with one another's ideas. Materials offer team-building activities for students to practice listening to each other and then building off of one another's ideas in a whole group discussion.

• Materials provide teacher guidance on preparing for student discourse. Teachers are provided guiding questions to promote student discourse throughout the chapter.

Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions.

- Materials support and guide teachers in facilitating finding solutions. For example, each chapter
  has a "Show What You Know" lab investigation that fosters students' critical thinking in finding
  solutions to real-world problems.
- Materials support and guide teachers in facilitating the sharing of students' thinking. For
  example, each chapter contains opportunities for teachers to begin conversations with a
  discussion prompt. In lesson 5.1 Explore section, students are asked about what the Earth's
  lithosphere is divided into to prompt discussion. A little further in the section, they are
  encouraged to sketch images in their Science Notebooks as paragraphs are read out of the text.
- Materials support and guide teachers in facilitating the sharing of students' thinking and finding solutions. For example, teacher support for Explore Lab CERs provides teachers with the organization and potential student answers.

#### **Indicator 6.1**

Materials include a variety of TEKS-aligned and developmentally appropriate assessment tools.

1	Materials include a range of diagnostic, formative, and summative assessments to assess student learning in a variety of formats.	М
2	Materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment.	М
3	Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts.	М
4	Materials include assessments that require students to apply knowledge and skills to novel contexts.	М

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include a variety of TEKS-aligned and developmentally appropriate assessment tools.

Materials include a range of diagnostic, formative, and summative assessments that include formal and informal opportunities to assess student learning in a variety of formats. Materials assess all student expectations and indicate which student expectations are assessed. Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts. Materials include assessments that require students to apply knowledge and skills to novel contexts.

Evidence includes but is not limited to:

Materials include a range of diagnostic, formative, and summative assessments to assess student learning in a variety of formats.

- Materials provide various forms of formative assessment throughout each lesson. For example, in Lesson 5.2 within the Student eBook, there are 3 "Apply It" sections. One of these provides a photograph of rocks and prompts students to draw arrows on the photograph, showing how they are moving laterally with respect to each other. In addition, there are numerous other questions posed throughout the Student eBook for them to answer.
- Teacher eBook materials provide summative assessment opportunities at the end of each lesson. For example, in Lesson 8.3 under Evaluate, a pre-made online assessment titled Lesson Review with five questions (3 short answer and 2 multiple choice) is available for students to be assigned. In addition, each chapter includes a Chapter Wrap Up, Chapter Test, and a Show What You Know Lab.
- Materials include formative assessments in a variety of formats to measure student learning and determine the next steps for instruction. Materials include discussion prompts that are designed to help teachers check student understanding at key points during instruction. For example, in the explore/explain on sustaining ecosystems, grade 7. The teacher is directed to have students look back at the food web diagrams on page 270, the energy diagram on page 271, and the trophic level diagram on page 272. The teacher poses questions about the disruption of energy flow, such as "Are there more producers or more consumers in these diagrams?", "Why are

- there more producers in these diagrams?" Materials direct the teacher to encourage to think about the trophic level of living trees and how their energy flows through a forest ecosystem when they decompose.
- Materials include several forms of diagnostic and formative assessments throughout lessons.
   For example, each lesson includes a Page Keeley Science Probe question teachers can use as a diagnostic tool to identify student misconceptions. In addition, the materials include pretests to assess students' understanding of the foundational knowledge necessary for the content presented in the current grade and chapter.

Materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment.

- Teacher eBook materials indicate which student expectations are being assessed. An assessment table in each unit overview shows question numbers and corresponding TEKS (both content and process skills if dual coded) for lesson assessments as well as chapter assessments. Answer keys are provided for every assessment.
- The materials assess all student expectations, as outlined in the TEKS, by grade level. The materials contain a cohesive scope and sequence that maps out and outlines what will be taught in a specific course or grade level. Lessons over each TEKS include a "Show What YOU Know:...", Chapter TEKS Review, and Chapter Test.
- Materials assess all student expectations over the breadth of the course and indicate which
  student expectations are being assessed in each assessment. In the Teacher's Guide, the
  materials indicate how lessons align with the curriculum for the grade level or subject. The
  materials include detailed TEKS-based lesson plans that outline how the materials can be used
  to teach specific concepts and skills, address specific students' expectations, and provide
  guidance on how to assess student learning.

Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts.

- Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts. For example, The materials include "Show What You Know" activities that provide assessment opportunities that integrate scientific concepts and scientific and engineering practices with recurring themes and concepts. In Chapter 6, Show What YOU Know: Save the Oceans, the Teacher Support document shows that the assessment covers science and engineering practices TEKS 7.1A, 7.1B, 7.1C, 7.2A, 7.2D, and 7.3A. It also covers recurring themes TEKS 7.5B and 7.5G. The scientific concepts covered are 7.11A and 7.11B.
- The materials include assessments that require students to integrate scientific knowledge and science and engineering practices with recurrent themes appropriate to the student expectation being assessed. The materials include assessments that require students to integrate scientific knowledge and science and engineering practices with recurrent themes appropriate to the student expectation being assessed. For example, materials provide the TEKS correlation for each assessment item, including the scientific and engineering practices or themes as well as teacher guidance on how these may appear on the state assessment.
- Materials include assessments that integrate scientific concepts and science and engineering
  practices where appropriate. These concepts and process skills TEKS are identified in a chart
  provided with lesson and chapter assessments.

#### Materials include assessments that require students to apply knowledge and skills to novel contexts.

- Materials include assessments that require students to apply knowledge and skills to novel
  contexts. For example, each chapter begins with a phenomenon that is central to the chapter's
  content. Throughout the lessons, students are learning the information that will make the
  phenomena more understandable and explainable. At the end of the chapter, students use the
  knowledge they learned to apply the information to a new situation through a scenario-based,
  student-developed lab.
- Materials include assessments that require students to apply knowledge and skills to a new
  phenomenon or problem. For example, in Lesson 8.1, students explore the hierarchical
  organization of organisms. Students then gather information from the text and engage in
  classroom discussions over the material. The Elaborate section also introduces students to organ
  transplants. Then, they apply the information in a scenario of a kidney transplant by identifying
  its hierarchical level and explaining how the transplant would help the organism function as a
  system.
- Materials include assessments that require students to apply knowledge and skills to a new phenomenon or problem. For example, in the Explain section, the "Apply it" questions require students to think about a science concept in a different context. In grade 7, chapter 5, students are asked to draw arrows (on a picture) showing how the rocks are moving laterally with respect to each other.
- Materials include assessments that require students to apply knowledge and skills to a new
  phenomenon or problem. For example, in the "Show What You Know" activities, the students
  are required to transfer their knowledge and apply their understanding from the context
  presented in the lesson to a new situation.

#### **Indicator 6.2**

Materials include guidance that explains how to analyze and respond to data from assessment tools.

1	Materials include information and/or resources that provide guidance for evaluating student	М
2	responses.  Materials support teachers' analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student	М
_	progress appropriate for the developmental level.	
3	Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension.	M
4	Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.	М

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include guidance that explains how to analyze and respond to data from assessment tools.

Materials include information and/or resources that provide guidance for evaluating student responses. Materials support teachers analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student progress appropriate for the developmental level. Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.

Evidence includes but is not limited to:

#### Materials include information and/or resources that provide guidance for evaluating student responses.

- Materials include information that provides guidance for evaluating student responses. For
  example, each chapter contains an "Evaluate" section for the lesson review in the teacher's
  eBook. Each Evaluate section contains information that guides the teacher in reviewing the
  essential question(s) by providing sample answers for student responses.
- Materials include resources that provide guidance for evaluating student responses. For
  example, each chapter contains "Instructional Options" that contain digital spotlight resources
  to aid in evaluating student responses. Teachers can assign "LearnSmart" which is an adaptive
  tool that allows remediation of lesson objectives and reviews key concepts with students for
  mastery.
- Materials include information that guides teachers in evaluating student responses. For
  example, in the teacher edition, the teacher support for the lesson review and chapter wrap-up
  questions includes sample answers for open-ended questions, which includes sample answers
  for open-ended questions and rationales for multiple-choice selections.
- Materials include information that guides teachers in evaluating student responses. Materials
  include follow-up suggestions for formative assessments in the Teacher's Guide, provide
  examples of acceptable answers for evaluating student responses, and include suggested
  teacher actions to address student learning gaps in lessons and units.

Materials support teachers' analysis of assessment data with guidance and direction to respond to individual students' needs, in all areas of science, based on measures of student progress appropriate for the developmental level.

- Materials support teachers' analysis of assessment data with guidance and direction to respond
  to individual students' needs, in all areas of science, based on measures of student progress
  appropriate for the developmental level. For example, under the "Evaluate" section of the
  teacher eBook, teachers can assign the LearnSmart adaptive tool that analyzes student
  responses and guides students to mastery based on individual students' needs. Each chapter
  lesson allows teachers to assign this if students need a review of content or if the lesson review
  was too challenging.
- Materials support teachers' analysis of assessment data with guidance and direction to respond
  to individual students' needs, in all areas of science, based on measures of student progress
  appropriate for the developmental level. For example, under the "Evaluate" section of the
  teacher eBook, teachers can assign leveled reading support for additional reading strategies and
  to scaffold learning vocabulary. Each chapter's lessons contain opportunities to do so and are
  catered to the individual student's needs.
- Materials provide guidance and tools to support teachers in responding to data to inform instruction. Materials support responses to individual students' needs through REINFORCE or EXTEND activities and through Emergent Bilingual/English Learner supports.
- Materials support the teacher's analysis of assessment data. The materials provide an
   "Assessment and Reporting eLearning" video within the Professional Development section of
   the ancillary materials. This video guides teachers on using assessments, how to generate class
   and student reports from the assessments, as well as how to build customized assessments.

Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension.

- Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. For example, each Chapter Pre-test allows the teacher to plan future instruction based on data accrued from the assessments. In each grade level, teachers are able to analyze the data using the "Reports" tab on the left toolbar. Teachers can view activity performance or standards performance and accommodate future lessons based on those data reports.
- Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. For example, each Chapter Assessment yields data for teachers to see which students have mastered the content and which students need more practice or supplemental instruction. Each Chapter contains an "Evaluate" section in the teacher's eBook. Teachers can then LearnSmart activities, Science Literacy Essentials, or a lesson review in order to intervene in student learning or extend student learning.
- Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. Page Keeley Science Probes can be used to pre-assess students to see what information they are coming to us already knowing and also where gaps or misconceptions may be.
- Assessment tools yield relevant information for teachers to use when planning instruction, intervention, and extension. Teachers are able to use the Assessment module in order to track student performance over time. Reports can be created for specific assignments or assessments

- for individual students or the class as a whole to see where students may need intervention and/or extension.
- Assessment tools yield relevant information for teachers to use when planning interventions or extensions. For example, reports generated at the end of a lesson or chapter can identify areas that need reinforcement or that can be extended upon.

Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data.

- Materials provide a variety of resources and teacher guidance on how to leverage different activities to respond to student data. For example, each chapter contains an "Evaluate" section in the teacher's eBook. Teachers can assign the LearnSmart activities, Science Literacy Essentials, or a lesson review in order to leverage different activities to respond to student data.
- Materials provide a variety of resources and teacher guidance on how to leverage different
  activities to respond to student data. For example, each chapter contains an "Evaluate" section
  in the teacher's eBook. Teachers can use the Page Keeley Science Probe sections to revisit key
  concepts in differentiating instruction. This allows the teacher to initiate different activities in
  response to the data collected from assessments.
- Materials provide a variety of teacher guidance for responding to student data. Within the Teacher eBook Chapter Reviews, guidance and instruction on how to respond to incorrect student answers are provided.
- Materials provide a variety of student resources for teachers to use in responding to performance data. The Teacher eBook provides REINFORCE and EXTEND activities for students to use based on formative assessments. These are found under Differentiation Options.
- Materials provide a variety of teacher guidance for responding to student data. The teacher
  guide includes suggested activities to assign students if they missed certain questions. For
  example, in grade 7, materials include a formative assessment evaluating what students
  understand about Organisms and Traits. The materials provide teachers with correct answers,
  and if teachers need to address learning gaps, the materials provide "instructional options" with
  resources for remediation.

#### **Indicator 6.3**

Assessments are clear and easy to understand.

1	Assessments contain items that are scientifically accurate, avoid bias, and are free from	М
	errors.	
2	Assessment tools use clear pictures and graphics that are developmentally appropriate.	М
3	Materials provide guidance to ensure consistent and accurate administration of assessment tools.	М
4	Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.	М

# Meets | Score 2/2

The materials meet the criteria for this indicator. Assessments are clear and easy to understand.

Assessments contain items that are scientifically accurate, avoid bias, and are free from errors. Assessment tools use clear pictures and graphics that are developmentally appropriate. Materials provide guidance to ensure consistent and accurate administration of assessment tools. Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.

Evidence includes but is not limited to:

#### Assessments contain items that are scientifically accurate, avoid bias, and are free from errors.

- Assessments contain items that are scientifically accurate. For example, the summative
  assessments align with the grade-specific TEKS, the chapter's big idea, and contain scientifically
  accurate information. In Grade 7, Chapter 6, the big idea is "Human activity can have impacts on
  the hydrosphere." The Chapter 6 summative assessment contains questions directly related to
  humans and the hydrosphere.
- Assessments contain items for the grade level or course that avoid bias. Formative and summative assessments include assessment items that present content and examples in a fair and impartial manner with no impact on student performance based on such factors as a student's home language, place of origin, gender, or race and ethnicity. For example, in grade, formative assessments equally present male and female human body systems and their identification with accurately labeled representations.
- Assessments contain items for the grade level that are scientifically accurate. Formative and summative assessments include assessment items that align with taught objectives and present grade-level content and concepts, science and engineering practices, and recurring themes and concepts in a scientifically accurate way. For example, in grade 7, a formative assessment after completing lesson 1, Chapter 8, about hierarchical organization in plants and animals, students are directed to use their science notebook and interactive word wall to review what they have learned throughout the lesson. The student ebook accurately asks students to describe the hierarchical organization within plants instead of ranking them.

#### Assessment tools use clear pictures and graphics that are developmentally appropriate.

- Assessment tools use clear pictures and graphics that are developmentally appropriate.
  - For example, questions contain graphs that are easy to read. Questions contain charts that are easily decodable and comprehensible.
  - For example, assessment items contain graphs where students can identify two variables.
  - For example, grade 7 assessment items include food webs that include arrows to clearly show the flow of energy through food webs connecting to energy pyramids to show trophic levels.
  - For example, grade 7 assessment items contain a distance-time graph that clearly shows the motion of a car during a 40-minute journey.

#### Materials provide guidance to ensure consistent and accurate administration of assessment tools.

- Materials provide guidance to ensure consistent and accurate administration of assessment tools. For example, each TEKS Review section in the student eBook provides an answer with teacher support. In Grade 7, Chapter 3, students answer a question about two marbles rolling along a sidewalk. It provides a sample answer and rationale for the answer (page 60, Student eBook).
- Materials provide guidance to ensure consistent and accurate administration of assessment tools. For example, there is a tab on the left tab bar where teachers can administer/assign specific assessments to classes.
- Materials provide clear guidance for teachers to consistently and accurately administer
  assessment tools. Under Chapter Wrap-Up and Assessment, there is a Teacher Support file for
  the Show What You Know activity. This provides the teacher with tips to help students during
  the activity. It also provides suggested answers to the questions.
- The materials include detailed information that supports the teacher's understanding of assessment tools and their scoring procedures. An assessment guide or a distinct section in the Teacher's Guide on assessment includes an overview of the assessment, scoring procedures, answer key, and an explanation for why the answer is correct.
- Materials provide clear guidance for teachers to consistently and accurately administer
  assessment tools. Materials include an assessment module that provides support on how to
  administer the formative and summative assessment items.
- Guidance is provided for teachers to ensure appropriate administration of assessments. For
  example, a professional development video module is provided to teachers explaining how to
  assign pre-constructed assessments as well as how teachers can develop their own assessments
  within the program.

Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals.

- Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals. For example, each chapter contains options to assign LearnSmart adaptive assessments.
- Materials include guidance to offer accommodations for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals. For example, each chapter contains options to assign TEKS check assessments.

- Materials offer accommodations for assessment tools so that students of all abilities can demonstrate mastery of learning goals. For example, Chapter Tests provide students with the ability to use a highlighter, notepad, calculator, line reader, or text-to-speech.
- Materials offer accommodations for assessment tools so that students of all abilities can
  demonstrate mastery of learning goals. For example, materials provide a text-to-speech feature
  on the web-based assessment platform, allowing students to hover over the text using a speech
  symbol cursor and converting it into a digital text read aloud.
- Materials offer accommodations for assessment tools so that students of all abilities can
  demonstrate mastery of learning goals. For example, materials provide options in digital to
  submit answers as a written-response. Select "want to type instead of draw" and "want to type
  instead of underline?"
- Assessments have varied types of questions, including multiple-choice, open-ended, true or false, and questions where students draw their answers.

#### **Indicator 7.1**

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

1	Materials provide recommended targeted instruction and activities to scaffold learning for	М
1	students who have not yet achieved grade-level mastery.	
2	Materials provide enrichment activities for all levels of learners.	М
3	Materials provide scaffolds and guidance for just-in-time learning acceleration for all	М
	students.	i

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include guidance, scaffolds, supports, and extensions that maximize student learning potential.

Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved mastery. Materials provide enrichment activities for all levels of learners. Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.

Evidence includes but is not limited to:

Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade level mastery.

- Materials provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved mastery. For example, each lesson has "reinforce" activities and strategies for differentiation that allow for intervention. In Grade 7, the teacher can "have students draw two diagrams that compare hydrogen and helium at the atomic level" (page 39, Teacher eBook).
- Some sentence stems are provided within the Teacher eBook to help scaffold instruction for those who have not yet achieved mastery. For example, in Lesson 1.1, In the Engage section, multiple sentence stems are provided to help students answer the Essential Question. (The individual parts represent..., The bike represents..., An individual part is different from the bike..., etc.)
- Materials ensure that teachers can target instruction to develop precursor skills necessary to access grade-level content. For example, introductory teacher guidance provides ways to build background knowledge and pre-teach skills when beginning a new unit.
- Materials provide additional resources for targeted instruction and differentiation to support students who have not yet achieved mastery. For example, materials provide resources to support additional practice in developing skills in a variety of ways and in different settings. These lessons are designed for small groups, peer-to-peer pairings, individual instruction, center time, or stations.

#### Materials provide enrichment activities for all levels of learners.

- Materials provide enrichment activities for all levels of learners. For example, each lesson contains reinforce, extend, conversation starters, and EB/EL Leveled supports. In Grade 7, teachers are given EB/EL supports for beginners, intermediate learners, and advanced/advanced high learners to "support students for writing sentences with the words more and less in the Apply It section" (page 47, Teacher eBook).
- Materials provide enrichment activities for all levels of learners. For example, each Explore Lab within each chapter contains an "Inquiry Spectrum" guide that allows teachers to alter the lab based on student needs. In Grade 6, teachers can give students one of three inquiries: 1) a structured inquiry where students are given steps to follow to discover the answer to the question: How do fluids of different densities interact; 2) a guided inquiry where students are given steps to follow to discover the answer to the question: How do fluids of different densities interact; or 3) an open inquiry where students are given a question to answer and materials to use. Students plan and conduct the lab, then determine how to represent collected data and how those data answer the question. (Page 23 TEKS Lab Library: Grade 7).
- Materials provide enrichment activities for all levels of learners. Teacher eBook materials
  provide an Extend option in the Elaborate section under Instructional Options. For example, for
  Lesson 4.2, students work in pairs to write a letter to NASA proposing a new experiment to be
  done on the International Space Station.
- Materials provide enrichment activities for all levels of learners. Teacher guidance and
  additional resources encourage the exploration and application of grade-level science
  knowledge and skills in a variety of ways, including applying new learning to things such as
  project-based explorations. For example, each unit includes a list of suggested projects that
  appeal to students' interests and abilities and includes extensions for students at mastery or
  identified as gifted and talented.
- The materials provide enrichment activities that account for learner variability. For example, materials provide videos or resources for professional development on extending learning for students at all levels.

#### Materials provide scaffolds and guidance for just in time learning acceleration for all students.

- Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.
   For example, each chapter contains an Extend section to support acceleration for students. In Grade 7, teachers can "have students research the use of an emulsifying agent in the preparation of a creamy salad dressing. If time permits, have them demonstrate the process to the class" (page 47, Teacher eBook).
- The lessons include recommendations for just-in-time scaffolds to develop productive perseverance of learning in the moment. For example, materials include questions for the teacher to support students when they struggle to maintain engagement on a demanding task.
- Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.
   For example, there are many extension sections throughout the chapters and lessons. They are found in the Elaborate section of the lessons as well as the Explore and Explain portions of the lessons.

#### **Indicator 7.2**

Materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.

2	Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content.	М
	engage students in the mastery of the content.	
	Materials consistently support flexible grouping (e.g., whole group, small group, partners,	М
	one-on-one).	
3	Materials consistently support multiple types of practices (e.g., modeled, guided,	М
	collaborative, independent) and provide guidance and structures to achieve effective	
	implementation.	
4	Materials represent a diversity of communities in the images and information about people	М
	and places.	

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.

Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. Materials consistently support flexible grouping (e.g., whole group, small group, partners, one-on-one). Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation. Materials represent a diversity of communities in the images and information about people and places.

Evidence includes but is not limited to:

Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content.

- Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. For example, each lesson contains opportunities for students to write and reflect by entering answers directly in an answer box.
- Materials include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. For example, each chapter includes self-reflection opportunities with journaling, partnered activities, and hands-on lab investigations.
- Materials are presented through a variety of developmentally appropriate instructional
  approaches. For example, lessons include teacher demonstrations, authentic hands-on labs, and
  open inquiry investigations. They have video clips to engage them with the phenomenon. The
  Student eBook connects the science concepts to real life through the Making Connections
  sections. For example, in Lesson 4.3: Life Beyond Earth, the Texas Spotlight section explains how
  the McDonald Observatory is working on searching for life outside of our solar system using the
  Hobby-Eberly Telescope.
- Materials engage students in the mastery of the content through a variety of developmentally appropriate instructional approaches. Materials provide a Page Keeley Science Probe in the

- Engage section of lessons. A variety of instructional approaches are suggested to explore students' background knowledge, such as Think-Pair-Share, Four Corners, and Sticky Bar Graphs.
- Materials engage students in the mastery of the content through a variety of developmentally
  appropriate instructional approaches. For example, the Explore Lab provides three levels of
  implementation, from structured to open inquiry, providing more guidance to struggling
  students and more freedom to those not struggling.

#### Materials consistently support flexible grouping (e.g., whole group, small group, partners, one on one).

- Materials consistently support flexible grouping. For example, within each chapter, there are opportunities for small groups in the lab investigations. In Grade 7, students are put in small groups for the quick launch and explore labs. The materials provide suggested group sizes with an explanation as to why that group size works best.
- Materials consistently support flexible grouping. For example, within each chapter, there are
  opportunities for independent or small-group interactions. In Grade 7, teachers are advised to
  assign activities as independent or group work (page 57, teacher eBook).
- Materials consistently support flexible grouping. Within the Teacher eBook, when small groups
  are recommended, there is a note in the instructions indicating how many per group. For
  example, "Assign groups of three...", This activity can be assigned as independent or group
  work, etc.
- Materials consistently support flexible grouping. Suggestions are provided for small group or one-on-one practice and activities. Suggestions may be labeled "suggestions for reteaching."

Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation.

- Materials consistently support multiple types of practices. For example, each Explore Lab within each chapter contains an "Inquiry Spectrum" guide that allows teachers to alter the lab based on student needs. In Grade 7, teachers can give students one of three inquiries: 1) a structured inquiry where students are given steps to follow to discover the answer to the question: How can comparing structures of elements and compounds be used to organize types of atoms; 2) a guided inquiry where students are given steps to follow to discover the answer to the question: How can comparing structures of elements and compounds be used to organize types of atoms; or 3) an open inquiry where students are given a question to answer and materials to use. Students plan and conduct the lab, then determine how to represent collected data and how those data answer the question (page 23, TEKS Lab Library: Grade 7).
- Materials consistently support multiple types of practices and provide guidance and structures
  to achieve effective implementation. For example, in the teacher's eBook, each lesson contains
  guidance on how to implement different aspects of the lesson. This includes modeled activities
  with quick launch labs, independent practice, and collaborative practice with exploring small
  group labs.
- Materials consistently support multiple types of practices and provide guidance and structures to achieve effective implementation. For example, the Teacher eBook materials provide an overview of the chapter with the Big Ideas discussed. Open-ended questions are also provided to drive instruction. Lessons include teacher demonstrations along with student labs.
- The materials consistently support multiple types of practices (e.g., modeled, guided, collaborative independent). For example, Lessons include opportunities for students to examine

recent scientific case studies and independently complete a reflection, argument, summary, or justification assignment.

#### Materials represent a diversity of communities in the images and information about people and places.

- Materials represent diverse communities using images and information that are respectful and inclusive. For example, Information in teacher guidance documents, student materials, scientific texts, and assessments positively portrays a diverse group of scientists and engineers representing a variety of genders, races, ethnicities, abilities, religions, and national origins.
- Materials represent diverse communities using images and information that are respectful and
  inclusive. For example, The names of individuals presented in assessment items equally include
  male and female names and represent individuals of diverse backgrounds, including races,
  ethnicities, and national origins. Additionally, materials proportionately use male and female
  names, as well as a diverse range of names, when presenting information on correct and
  incorrect responses, explanations of phenomena, and solutions to problems.
- Materials represent a diversity of communities in the images and information about people and places. For example, the videos and images throughout the materials showcase a variety of races, ethnicities, and religions.

#### **Indicator 7.3**

Materials include listening, speaking, reading, and writing supports to assist emergent bilingual students in meeting grade-level science content expectations.

1	Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS.	М
2	Materials encourage strategic use of students' first language as a means to linguistic,	М
	affective, cognitive, and academic development in English.	

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include listening, speaking, reading, and writing supports to assist emergent bilingual students in meeting grade-level science content expectations.

Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS. Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English.

Evidence includes but is not limited to:

Materials include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS.

- Materials include guidance for linguistic accommodations that are connected to various levels of English language proficiency. For example, each lesson contains reinforcement, extend, conversation starters, and Emergent bilingual (EB)/ English Learner (EL) Leveled Supports. In Grade 7, teachers are given EB support for beginners, intermediate learners, and advanced/advanced high learners to "support students as they learn to explain the difference between physical property and physical change" (page 47, Teacher eBook).
- Materials include guidance for linguistic accommodations that are connected to various levels of English language proficiency. For example, each chapter contains a "Science Language and Content Acquisition" section that includes resources for all levels of EB students, including "Word Labs" and "Science Literacy Essentials."
- Materials include linguistic accommodations commensurate with various levels of English language proficiency. Within the Teacher eBook, there are EB/EL Tips. These suggestions include ways teachers can help EB students interact with their peers.
- Materials include guidance for linguistic accommodations. For example, at the beginning of each
  chapter, there is a page with Emergent Bilingual/ English Language Supports. These supports
  have ways to activate prior knowledge based on EB level, as well as Spanish Language Transfer
  skills and cognates.
- Materials include guidance for linguistic accommodations. For example, ELPS Correlation standards are provided for each lesson and an overview document within the resources.

Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English.

- Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English. For example, within each chapter, there are opportunities for independent or small-group interactions. In Grade 7, teachers are advised to assign activities as independent or group work (page 57, Teacher eBook).
- Materials encourage strategic use of students' first language as a means to linguistic, affective, cognitive, and academic development in English. For example, at the beginning of each chapter, there is a "Spanish Language Transfer" section. This includes support for transferable and nontransferrable skills as well as Spanish cognates and false cognates.
- Teacher eBook materials include a section titled Emergent Bilingual/English Learner Support.
   This section has a description of how to activate prior knowledge for various levels of EB students (Beginning, Intermediate, and Advanced/Advanced High).
- Teacher eBook lessons include a section called "Interactive Word Wall." For each interactive word wall, vocabulary is listed that will be used throughout the lesson, a list of cognates, words with multiple meanings, and the framework of what the interactive word wall should look like.

#### **Indicator 7.4**

Materials provide guidance on fostering connections between home and school.

1	Materials provide information to be shared with students and caregivers about the design of	М
1	the program.	
	Materials provide information to be shared with caregivers for how they can help reinforce	М
2	student learning and development.	
3	Materials include information to guide teacher communications with caregivers.	М

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials provide guidance on fostering connections between home and school.

Materials provide information to be shared with students and caregivers about the design of the program. Materials provide information to be shared with caregivers for how they can help reinforce student learning and development. Materials include information to guide teacher communications with caregivers.

Evidence includes but is not limited to:

Materials provide information to be shared with students and caregivers about the design of the program.

- Materials provide information to be shared with students and caregivers about the design of the
  program. For example, each chapter contains a "Letter to Home" for teachers to give to parents
  and students, informing them of what the class is exploring, the TEKS associated with it, and
  appreciation for the support of the parents. In Grade 7, teachers are given a letter to home for
  Chapter: Scientific and Engineering Practices.
- Materials provide information to be shared with students and caregivers about the design of the program. For example, each chapter contains an outline that shows the TEKS for the entire chapter. In Grade 7, students see TEKS 8.1, 8.2, 8.3, 8.4, and 8.5 for the Chapter: Scientific and Engineering Practices.
- Materials provide information to be shared with students about the design of the program.
   Students are given descriptions of the meaning of icons, such as the Notebooking icon and how to record their thoughts.

Materials provide information to be shared with caregivers for how they can help reinforce student learning and development.

Materials provide information to be shared with students and caregivers for how they can help
reinforce student learning and development. For example, each chapter contains a "Letter to
Home" that includes a family activity. In Grade 7, parents are given the activity to "help your
child research a scientist that has had a significant impact on our lives." Parents encourage their
students to create a poster to teach others about the scientist.

- Materials provide information to be shared with students and caregivers for how they can help reinforce student learning and development. Materials include a Family Activity found in the "Letter to Home" in the Resources section. This page gives a brief overview of the concept being taught and some of the key vocabulary. Then, it suggests an activity families can do together over the concept. For example, in Grade 7, parents are given the activity to find out, "Why does a gelatin recipe have you mix in hot water first, and why do you have to stir powdered drink mix." Parents encourage students to use academic terms including solvent, solutes, rate of dissolution, and agitation.
- Materials provide information to be shared with caregivers for how they can help reinforce student learning and development. For example, the Explore/Explain section of some of the lessons provides EB/EL tips on how to engage caregivers in student learning.

#### Materials include information to guide teacher communications with caregivers.

- Materials provide information to share with students and caregivers about the design of the program. Examples include a letter home for every chapter, which includes the standards that are being covered.
- Materials include a "Letter to Home" for each chapter. These are found in the Resources section. Letters explain to caregivers what students will be learning about in that chapter. TEKS covered are also listed and are written out.
- Teacher eBook materials contain tips for communicating with parents of Emergent
  Bilingual/English Learner students. For example, one is found on page 59 of the Teacher eBook
  just above the Assess section. It is titled "EB/EL Tip." This tip suggests teachers should inform
  parents about the science topics being learned and encourage them to discuss the topics with
  their children.

#### **Indicator 8.1**

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

1	Materials are accompanied by a TEKS-aligned scope and sequence outlining the order in which knowledge and skills are taught and built in the course materials.	М
+	which knowledge and skills are taught and built in the course materials.	
2	Materials provide clear teacher guidance for facilitating student-made connections across	М
-	Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts.	
2	Materials provide review and practice of knowledge and skills spiraled throughout the year	М
3	to support mastery and retention.	

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include year-long plans with practice and review opportunities that support instruction.

Materials are accompanied by a TEKS-aligned scope and sequence outlining the order in which knowledge and skills are taught and built in the course materials. Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts. Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.

Evidence includes but is not limited to:

Materials are accompanied by a TEKS aligned scope and sequence outlining the order in which knowledge and skills are taught and built in the course materials.

- The materials provide a TEKS Correlation Guide that gives the TEKS and page numbers in the Student eBook and the lab(s) that cover those TEKS. For example, in the TEKS Correlations: Grade 7 file in the Planning Resources section of Teacher Resources, TEKS are listed in numeric order.
- Materials include a year-long scope and sequence within the Pacing Guide. Materials guide teachers with suggested time frames for units and lessons as well as their TEKS alignment.
- Materials include "TEKS at a Glance" within each chapter. The TEKS at a Glance includes a table
  where the TEKS is listed and also shows in which lesson the TEKS will be included.
- Materials provide a lab library of TEKS-aligned scope and sequence that includes a "TEKS Focus
  in this Lab" section for each lab in each chapter. Teachers can reference the "TEKS Correlation:
  Grade 7" document that outlines each TEKS and is specific in which chapter(s) and lab(s) to focus
  on. For example, in grade 7 Chapter: Scientific and Engineering Practices, there are 5.5 periods
  given or 2.75 blocks given to Lesson 1: TEKS 7.1A, 7.1H, 7.2A Scientific Practices.

Materials provide clear teacher guidance for facilitating student made connections across core concepts, scientific and engineering practices, and recurring themes and concepts.

Materials provide clear teacher guidance for facilitating scientific and engineering practices.
 Within the "Scientific and Engineering Practices" chapter in the Teacher's eBook, teachers are

- guided in guiding discussions and topic questions on three categories: Scientific Practice, Engineering Practices, and Science and Society.
- In the Teacher's eBook, under Lesson Overview, a TEKS Progression flowchart shows teachers what students have learned in previous grade levels in this learning band and aids them in helping students make connections across the content strand. For example, for 7.9B on Gravity and Motion, the TEKS Progressions indicate students have some exposure in grades 5 and 6 with TEKS 5.9A and 6.9B.
- The Teacher's eBook contains a Target Vocabulary chart under Science Language and Content Acquisition, which indicates prior knowledge terms, current lesson vocabulary (with linked glossary), supporting vocabulary, science and engineering practices, and recurring themes.
- The TEKS at a Glance at the beginning of each chapter provides information on where in each lesson the content, scientific and engineering practices, and recurring themes and concepts are found and covered in instruction.
- The Teacher's eBook includes a Labs/Demos at a Glance resource that provides a "Quick Language Engage" activity for each lesson as well as an Engage Lab for each lesson. At the end of the chapter, there is a "Show What You Know" activity that incorporates the content, scientific and engineering practices, and recurring themes presented in the chapter. The student eBook asks students to revisit the Engage activity at some point in the lesson.

Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.

- The materials provide opportunities for reviewing and practicing grade-level content-specific knowledge throughout the year. Each chapter is connected to previous years and content taught but is also connected to current year content connections (i.e., interactive word wall and reference to previous vocabulary words). For example, in Chapter 6, density is repeated; this relates to the word wall and spiraling vocabulary back in. The Teacher's eBook supports the continued spiraling of prior knowledge. In addition to the Science Language and Content Acquisition section, the Interactive Word Wall section of the Teacher's eBook supports building on prior knowledge. In "What words will students practice?," prior knowledge terms are included as students continue to build meaning with new concepts.
- The Teacher's eBook contains a Chapter Wrap-Up section at the end of each chapter. In this section, students revisit the Big Ideas of the chapter. Content is spiraled back to previous grade levels through the TEKS Progression in Lesson Overview.
- The TEKS Correlation Guide highlights the spiraling of knowledge and skills throughout the year. The document includes page numbers from the Teacher and Student eBooks where content is addressed, as well as various labs where content is included. For example, in each chapter, a TEKS progression identifies the vertical alignment from previous grade levels.

#### **Indicator 8.2**

Materials include classroom implementation support for teachers and administrators.

	Materials provide teacher guidance and recommendations for use of all materials, including	М
1	text, embedded technology, enrichment activities, research-based instructional strategies,	
	and scaffolds to support and enhance student learning.	
1	Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level.	М
	standards within the context of the grade level.	
3	Materials include a comprehensive list of all equipment and supplies needed to support	М
3	instructional activities.	
4	Materials include guidance for safety practices, including the grade-appropriate use of safety	М
4	equipment during investigations.	

# Meets | Score 2/2

The materials meet the criteria for this indicator. Materials include classroom implementation support for teachers and administrators.

Materials provide teacher guidance and recommendations for use of all materials, including text, embedded technology, enrichment activities, research-based instructional strategies, and scaffolds to support and enhance student learning. Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level. Materials include a comprehensive list of all equipment and supplies needed to support instructional activities. Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations.

Evidence includes but is not limited to:

Materials provide teacher guidance and recommendations for use of all materials, including text, embedded technology, enrichment activities, research based instructional strategies, and scaffolds to support and enhance student learning.

- Materials provide teacher guidance and recommendations for the use of the text via the
  Teacher's eBook and technology using the "digital spotlight" feature within each chapter of the
  Teacher's eBook. Students follow along with the teacher and edit discussion questions, Essential
  Questions, and enrichment activities within their student eBook.
- Materials provide teacher guidance and recommendations for the use of embedded technology.
  For example, within the Teacher's eBook are videos to launch lessons (such as the "Chapter
  Launch Videos"), videos embedded throughout lessons (such as the "Explain It" videos), videos
  to enhance student learning (such as the "Take It Further" videos), and videos for "Anytime
  Labs."
- Materials provide scaffolds to support and enhance student learning. For example, within each
  chapter in the Teacher eBook, a section titled "Course-Wide Differentiation Support" provides
  the teacher with ways to implement scaffolded instruction. For example, the Explore/Explain
  Instructional Options include two Reinforce options, two Extend options, and EB/EL Leveled
  Support.

Materials provide research-based instructional strategies. For example, each chapter includes a
"Plan your lesson" guide with partnered discussion questions, journaling techniques and tips,
interactive word wall components, and a 5E lesson frame to implement. There is also a
"Foldables" section where students are guided to create their own study tools.

Materials include standards correlations, including cross content standards, that explain the standards within the context of the grade level.

- Materials include standard correlations that include cross-content standards. For example, under Program Resources in "Grade 7: Content Correlations," Math standards are given for various chapters and lessons. TEKS 7.4A, 7.6C, and 7.6H for Math correlate to Grade 7, Chapter 7, Lesson 2: Lesson Review in the Student and Teacher's eBooks.
- Each chapter begins with a "TEKS at a Glance" chart showing in which lessons the different TEKS are covered. While it does not list every grade level TEKS, it does include the Scientific and engineering practices TEKS. Some also list the Recurring themes and concepts TEKS.
- The materials include a "Correlations to TEKS" document that includes a breakdown of the TEKS and where to find the TEKS in the student and teacher materials.
- The materials include a "Correlations to ELPS" document that breaks down the ELPS and identifies where to find them in the student and teacher materials.
- The Teacher's eBook provides cross-content correlations for the ELPS and Math, along with a separate document within Planning Resources. The ELPS correlation has an explanation; Math does not. However, materials will be revised to include correlations to the cross-content area of English language arts to the Math correlations. Materials will include ELAR and Math TEKS in the correlation document to provide context within the grade level. The Math correlations will be revised to provide clear locations (for example, "STEM Connection: Focus on Math" will be changed to "Student Edition: 100" to indicate the page location).

Materials include a comprehensive list of all equipment and supplies needed to support instructional activities.

- Materials include a comprehensive list of all equipment and supplies needed to support instructional lab activities. For example, under Program Resources in the "TEKS Lab Library: Grade 7" document, there is a list of all materials needed under the Plan section.
- Under Program Resources in the "TEKS Lab Library: Grade 7" document, there is a list of
  alternative materials under the Plan section. Therefore, if the regular materials are unavailable,
  alternative options exist.
- Teacher support materials provide a materials and equipment list indicating the amount and size needed (when applicable) for labs and activities. For example, in the Resources tab for Chapter 4, Lesson 4.3, Teacher Support Explore Lab: Analyze Temperature and Proximity, a file lists the materials needed for the investigation per group as a heat lamp, thermometer, glass jar with lid, string, masking tape, and meter stick.
- Student Labs provide a materials and equipment list. For example, the Resources tab for Chapter 4, Lesson 4.3, Explore Lab: Analyze Temperature and Proximity file (student file) includes a bulleted list of the materials needed for the investigation as a heat lamp, thermometer, glass jar with lid, string, masking tape, scissors, meter stick.
- The materials required for the lesson can be found in the Teacher's Quick Launch for each lesson in each chapter. For example, one Quick Launch states, "Gather materials needed for this activity. Materials are listed in the Quick Launch teacher material."

• The Teacher's eBook provides a materials list for each lab and demonstration on the Labs/Demos at a Glance page.

Materials include guidance for safety practices, including the grade appropriate use of safety equipment during investigations.

- Materials provide guidance for safety practices that includes the grade-appropriate use of safety
  equipment during safety investigations. For example, students and teachers have access to the
  Lab Skill and Safety Handbook, which includes an introduction to safe practices, preventative
  safety equipment with explanations, general instructions for lab work and clean up, and
  concludes with an emergency overview.
- Materials guide students as to which safety practices should be taken during investigations.
   Student Labs on the Resources tab have science safety icons and instructions for them to "Read and complete a lab safety form."
- The materials provide "Lab Support and Projects" that you can choose from the dashboard. The materials provide a Lab Safety form, Lab skill and Safety Handbook, and Safety symbols.
- Teachers are provided a Handbook with Safe Practices, Protective Safety Equipment, Lab Work, Cleanup, and Emergencies information—this information is visible to students. Teachers are provided Lab Safety Symbols, their meanings, potential hazards, precautions to take, and how to respond to incidents—this information is visible to students. Teachers are provided a Lab Safety Form for students to fill out prior to the lab with questions to check their understanding of what they are to do during the lab.

#### **Indicator 8.3**

Materials provide implementation guidance to meet variability in program design and scheduling.

1	Materials support scheduling considerations and include guidance and recommendations	М
	on required time for lessons and activities.	
2	Materials guide strategic implementation without disrupting the sequence of content that	М
2	must be taught in a specific order following a developmental progression.	
3	Materials designated for the course are flexible and can be completed in one school year.	PM

# Partial Meets | Score 1/2

The materials partially meet the criteria for this indicator. Materials provide some implementation guidance to meet variability in program design and scheduling.

Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities. Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression. Materials designated for the course are inflexible and cannot be completed in one school year.

Evidence includes but is not limited to:

Materials support scheduling considerations and include guidance and recommendations on required time for lessons and activities.

- Materials include guidance and recommended required times for lessons and activities. For
  example, in the "Chapter Resource Snapshot" within each lesson, teachers are provided with an
  overview of the resources available for supporting the teacher. Within the Program Resources
  tab, a "Pacing Guide: Grade 7" document guides teachers with how many periods or blocks to
  spend on each lesson within each chapter.
- Within the Teacher's eBook, lessons have the Days of Learning for each part of the 5E lesson in the "Plan Your Lesson" section. This section indicates an estimate of how long each part should take. For example, Chapter 6, Lesson 6.1 estimates Day 1: Engage will require 15 minutes for instruction and 10 additional minutes for assessment. Days 2 and 3 will require 80 minutes for instruction in Explore/Explain and 10 minutes for assessment.
- Throughout the lessons, there are alternatives or suggestions for adjusting the lesson if the class
  is short on time. For example, Lesson 4.1's Engage has a note that the activity and video both
  demonstrate the same concept. If time is limited, the teacher may choose to only do one of
  them.
- The Pacing Guide provides the estimated amount of time for each chapter and lesson by class period or block.

Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression.

 Materials provide a guide at the beginning of each chapter in the Teacher's eBook that allows strategic implementation without disturbing the sequence of content that follows. For example,

in "Chapter 1: Lesson 1.1 TEKS 7.6A, 7.6B," the Lesson Overview section describes the TEKS progression in grades 4–8, which allows the teacher to strategically implement the lesson in their classroom.

- In each lesson overview, a "TEKS Progression" for grades 4–8 indicates the developmental progression of the TEKS. This resource supports vertical alignment.
- Each lesson is organized in the 5E format, allowing for strategic implementation. "Explore" is based on students having completed "Engage"; "Explain" assumes students have completed "Explore," etc. Each lesson within a chapter builds on the previous lesson.

#### Materials designated for the course are flexible and can be completed in one school year.

- Materials provide a Pacing Guide under Program Resources that is designated to be completed
  in one school year. For example, in the "Pacing Guide: Grade 7," the total periods for the
  program equals 170 periods or 90 blocks. While the materials do provide a short-on-time
  section for individual lessons, there is no guidance on long-term planning for the entire scope of
  the year. While materials include a 170-day calendar, there is no accommodation for various
  testing days and other non-instructional days.
- Materials provide a breakdown of the pacing of a 5E lesson for each lesson in each chapter. For example, in each chapter lesson, the 5E lesson is broken down by days and the appropriate number of days.
- Multiple lesson options are included for most 5E lesson parts, allowing for flexibility in the
  lesson-planning process. For example, if teachers have ample time, Lesson 5.1's Engage section
  includes a Foldable activity and a phenomenon video. They both demonstrate the same
  concept, so if time does not allow, teachers can choose to only complete one or the other.

#### **Indicator 9.1**

The visual design of materials is clear and easy to understand.

1	Materials include an appropriate amount of white space and a design that supports and	Yes
	does not distract from student learning.	
2	Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting.	Yes
2	engagement without being visually distracting.	
3	Materials include digital components that are free of technical errors.	Yes
•		

#### **Not Scored**

The materials meet the criteria for this indicator. The visual design of materials is clear and easy to understand.

Materials include an appropriate amount of white space and a design that supports and does not distract from student learning. Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. Materials include digital components that are free of technical errors.

Evidence includes but is not limited to:

Materials include an appropriate amount of white space and a design that supports and does not distract from student learning.

- Materials include an appropriate amount of white space and a design that supports and does
  not distract from student learning. The amount of white space allows students to stay focused
  on specific content and specific sections of the text. The text and diagrams are centered to keep
  the student focused on the appropriate section.
- Materials include an appropriate amount of white space and a design that supports and does
  not distract from student learning. For example, the font is consistent throughout each reading
  section. The coloring and design of each section are clear and simple in order for students to
  stay focused. Each section is short and concise in a way that allows students to stay engaged and
  follow the sequence of instruction.
- Materials include an appropriate amount of white space and an overall design that does not
  distract from student learning. The white space around the text makes content easy to read and
  comprehend. Margins, edges, and empty spaces around the content are consistent throughout
  digital materials. Similar spacing is used between sections. There are a limited number of fonts
  used. Color is used intentionally and consistently to guide the user through the content.
- Yes, the digital materials include an appropriate amount of white space and overall design that does not distract from student learning. For example, The design of the materials includes appropriate use of white space, such as the following: The white space around the text makes content easy to read and comprehend. Margins, edges, and empty spaces around the content are consistent throughout digital materials.

- Materials use similar spacing between sections, equal line height in body text, and adequate spacing between paragraphs (greater than the line height of body text). Materials use a limited number of fonts.
- Materials include an appropriate amount of white space and a design that supports and does not distract from student learning. White space in margins and between content within a page is consistent and appropriate. Fonts are easy to read and are of a good visual size.

Materials embed age appropriate pictures and graphics that support student learning and engagement without being visually distracting.

- Materials embed age-appropriate pictures and graphics that support student learning and
  engagement without being visually distracting. For example, throughout each chapter, there are
  diagrams and graphics that give students a visual representation of the content being covered.
   These are colorful enough for students to find appealing while not being a distraction.
- Student eBook materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, grade 7 models of periodic tables appear simpler and less detailed than those in high school chemistry materials.
- Student eBook materials include detailed visuals with accurate labels. Grade 7 materials in Chapter 5 include labeled graphics depicting the difference between divergent and convergent plate boundaries.
- Materials embed age-appropriate pictures and graphics that support student learning and
  engagement without being visually distracting. For example, grade 7 materials include a photo
  that clearly shows the planets' orbital paths with a cross-section magnifying the inner planets'
  orbital paths.
- Materials embed age-appropriate pictures and graphics that support student learning and
  engagement without being visually distracting. For example, in the grade 7 student ebook, page
  77, there is an activity to draw arrows between Object A and Object C and then between Object
  B and Object C to represent the force of gravity between them.
- Materials embed age-appropriate pictures and graphics that support student learning and
  engagement without being visually distracting. Pictures and graphics are appropriate for the
  content and support the content visually to make it more comprehensible for students,
  including EB students as well as struggling students.

#### Materials include digital components that are free of technical errors.

- Materials include digital components that are free of technical errors. Each resource has
  followed consistent grammar rules of the English language. This includes the material being free
  of spelling and punctuation errors.
- Materials include digital components that are free of technical errors. Each material is accurate in the representation of the TEKS and is consistent with providing accurate information.
- Materials include digital components that are free of technical errors. No inaccurate or misleading information is provided. No glitches in any of the resources were found. Digital components are consistent across grade levels.

#### **Indicator 9.2**

Materials are intentionally designed to engage and support student learning with the integration of digital technology.

1	Materials integrate digital technology and tools that support student learning and	Yes
	engagement.	
2	Materials integrate digital technology in ways that support student engagement with the	Yes
	Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content.	
3	Materials integrate digital technology that provides opportunities for teachers and/or	Yes
3	students to collaborate.	
1	Materials integrate digital technology that is compatible with a variety of learning	Yes
4	management systems.	

#### **Not Scored**

Materials are intentionally designed to engage and support student learning with the integration of digital technology.

Materials integrate digital technology and tools that support student learning and engagement. Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content. Materials integrate digital technology that provides opportunities for teachers and/or students to collaborate. Materials integrate digital technology that is compatible with a variety of learning management systems.

Evidence includes but is not limited to:

#### Materials integrate digital technology and tools that support student learning and engagement.

- Materials integrate digital technology and tools that support student learning and engagement.
   For example, the materials integrate online learning by having students assigned to different chapters throughout the school year.
- The materials support engagement by containing questions within chapters for students to reflect upon. There are multiple opportunities for students to engage with readings with partners and small groups. The Student eBook enhances learning through such features as interactives, simulations, videos, and online assessments. Student digital components include embedded tools, such as note-taking, variable font size, text-to-speech, annotations, and highlighting.
- The materials provide guidance for integrating digital technology and tools in whole group, small group, and individual settings. Digital technology and tools can be projected on a large screen or individual student device and utilized with touchscreen technology or a keyboard and mouse.
- Materials provide engaging phenomena videos and lab simulations for students, as well as planning resources for teachers

Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade level content.

- Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content. For example, students are provided with multiple hands-on activities to conduct throughout the year using technology.
- students engage with content by answering multiple check-in questions regarding the content. Then, students can communicate their findings with partners or small groups.
- In Chapter 1 of the Student eBook, students describe the cause and effect (chemical or physical change) relationship when ice wedging occurs.
- In another example, materials provide opportunities for students to obtain, evaluate, and communicate information using digital tools. Grade 7 materials provide a short video, "Creating Compounds." Students reflect on the way the elements change in appearance when combined with other elements, and they record their responses in their science notebooks.
- Other examples include grade 7 materials that provide a simulation that shows the cause and effect of gravity on the shape of orbits and materials that include interactive eBooks, lab simulations, and videos, as well as STEM connections.

Materials integrate digital technology that provides opportunities for teachers and/or students to collaborate.

- Materials integrate digital technology that provides opportunities for teachers and students to
  collaborate. For example, teachers can view student scores through the "My Reports" tab. From
  this information, teachers can collaborate with students to create a learning plan.
- One example is that teachers can assign students the LearnSmart adaptive tool based on student data. From there, students can review content and collaborate with teachers on improvements.
- Materials integrate digital technology that provides opportunities for teachers and students to collaborate. Activities such as simulations, virtual labs, and interactive case studies are encouraged to be completed in small groups.
- Materials also include digital activities that encourage collaboration through simulations, virtual labs, and interactive case studies.
- Materials integrate digital technology that provides opportunities for teacher-to-student collaboration. For example, materials include the option for teachers to make a note on assignments that have been assigned to students in the grade book.

#### Materials integrate digital technology that is compatible with a variety of learning management systems.

- Materials integrate digital technology that is compatible with a variety of learning management systems. All of the materials and assessments are accessible via Google Chrome or any other web browser. The materials are available for easy download and are editable. This includes labs, letters home, and assessments.
- Materials are accessible online through devices with internet access. Many of the materials are also able to be downloaded and therefore accessible without access to the internet.
- Digital materials are accessible with a variety of learning management systems. For example, materials integrate with the following learning management systems: Blackboard Learn, D2L Brightspace, Canvas, Google, Schoology, Classlink, and Moodle.

•	Digital materials are accessible online through any device with internet access, including Chromebooks, iPads, PCs, iMacs, and smartphones.

#### **Indicator 9.3**

Digital technology and online components are developmentally and grade-level appropriate and provide support for learning.

1	Digital technology and online components are developmentally appropriate for the grade	Yes
	Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression.	
2	Materials provide teacher guidance for the use of embedded technology to support and	Yes
-	enhance student learning.	
2	Materials are available to parents and caregivers to support student engagement with	Yes
3	digital technology and online components.	

#### **Not Scored**

Digital technology and online components are developmentally and grade-level appropriate and provide support for learning.

Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression. Materials provide teacher guidance for the use of embedded technology to support and enhance student learning. Materials are available to parents and caregivers to support student engagement with digital technology and online components.

Evidence includes but is not limited to:

Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression.

- Digital technology and online components are developmentally appropriate for the grade level. For example, 6-8th grade students are able to scroll through each chapter's contents in a straightforward manner. Students are given small chunks of information to process at a time.
- Digital technology and online components are aligned with the scope and approach to science knowledge and skill progression. For example, 6-8th grade students reading excerpts, activities, labs, and assessments directly align with the TEKS. This follows the progression to the next grade level.
- Digital technology and online components are aligned with the grade-level scope and approach
  to science knowledge and skills progression. Materials include TEKS correlations to each
  chapter. For example, the Get Started materials include a Table of Contents that outlines the
  order in which TEKS are taught.
- The materials provide a rationale for the age-appropriateness of digital and online components.
   Grades 6-8 materials provide an explanation for the suitability, Explore Simulations, Virtual Field
   Trips, Interactive Galleries, Virtual Career Fairs, LearnSmart, and WordLab

Materials provide teacher guidance for the use of embedded technology to support and enhance student learning.

- Materials provide teacher guidance for the use of embedded technology to support and enhance student learning. For example, each chapter contains digital spotlight sections that contain various guidance on the embedded technology. Each chapter contains ways to enhance student learning through digital technology. This includes LearnSmart adaptive tools to help students learn.
- The Program Resources include Universal Teacher Support Strategies, as well as Professional Development for Assessments.
- Materials provide teacher guidance for the use of the embedded technology to support and enhance student learning. For example, the materials provide specific teacher guidance for embedding the technology within lessons and assessments. Materials include best practices for using embedded technology for differentiating instruction, using technology to promote collaboration, and incorporating multimedia resources into lessons. Materials include a rationale for balancing paper-and-pencil activities for fine motor skills development with technology use. For example, grades 6-8 materials provide both tips for science notebooks and also have embedded questions that students can answer using technology.
- Guidance is provided with tips for how teachers can monitor student progress and evaluate the effectiveness of the technology.
- Embedded technology support includes letters home for each lesson, EB supports, and strategies, vocabulary strategies, and documents providing teachers support with laboratory investigations.

Materials are available to parents and caregivers to support student engagement with digital technology and online components.

- Materials are available to parents and caregivers to support student engagement with digital
  technology and online components. For example, each chapter contains a "Letter to Home" for
  the teacher to give to parents and students, informing them of what the class is exploring, the
  TEKS associated with it, and appreciation for the support of the parents. In Grade 7, teachers are
  given a letter to home for Chapter: Scientific and Engineering Practices.
- Each chapter contains an opener that shows the TEKS for the entire chapter. In Grade 7, students see TEKS 8.1, 8.2, 8.3, 8.4, and 8.5 for the Chapter: Scientific and Engineering Practices.
- Materials include resources for parents and caregivers on how to support student engagement through a letter to families for each unit, including a family activity they can choose to complete. Parents can also access student resources using their student's credentials.
- The materials provide a letter to Home for each chapter for all grades 6-8. The Letter to Home
  includes a list of the specific instructional TEKS and a Family Activity that provides parents and
  caregivers opportunities to expand on the science and engineering concepts presented in the
  classroom.