

McGraw Hill Texas Science Grade 8

McGraw Hill Texas Science Grade 8 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.

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- 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.

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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.	M
2	Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes.	M
3	Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.	M
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.	M

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 8, students “understand how a pure substance made of one type of atom is different from a molecular compound, a homogeneous mixture, and a heterogeneous mixture; create diagrams or drawings to model pure substances, molecular compounds, solutions or homogeneous mixtures, and heterogeneous mixtures; and have an understanding of how to classify elements, compounds, homogeneous mixtures, and heterogeneous mixtures.”

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- 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 4, Lesson 4.1, all versions of Explore Lab: Compare the Characteristics of Stars have students graphing and analyzing data. Both Inquiry versions 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 overarching 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 8, 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 7, Lesson 7.1, in the Explore/Explain, Teach section, materials describe how the theme of Matter and Energy 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 following lesson within each chapter. In grade 8, students define elements, compounds, and mixtures before understanding the properties of water, acids, and bases. This builds on the next lesson by integrating what students learned about elements, compounds, mixtures, water, acids, and bases with the conservation of mass within chemical reactions.
- 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 8, teachers are given the TEKS progression from grade 6 through high school chemistry on the “elements, compounds, and mixtures.”

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- 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 context, 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 8. In Lesson SEP 2, students “use engineering practices to design a model to solve a defined problem, design and test a paper bridge and then evaluate its ability to hold washers, and recognize that there are multiple solutions to solve a problem and that design solutions can be evaluated using criteria.”
- 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 8, students use an Explore Lab to compare the model of an element to the model of a compound 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 8, materials provide opportunities for students to plan and carry out investigations in each lesson. For example, in the Properties and Conservation of Matter chapter, students examine a phenomenon of a chlorine tablet being added to a pool. The teacher is given questions in the materials to facilitate students’ learning: “Why do you think regular testing of the chlorine concentration in pool water is necessary?” “What effect might heavy use of the pool on a given day have on the chlorine concentration?”

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

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 8, students investigate two real-world phenomena or problems: "How can the pH of a sample be measured and determined?" and "How can the pH be changed to fall within a specific range?" 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 in each discipline. Students develop content knowledge as they work to construct explanations of the phenomena and/or solve engineering problems. For example, in Chapter 8: Health and Survival of Organisms, students see a picture and are asked, "How does the sundew plant thrive in its environment?" The students are prompted to watch a video, "Carnivorous Plants," to observe the science concept in action. After the students progress through the lessons in Chapter 8, the materials provide a chapter wrap-up where the initial questions are asked again, and the students are prompted to use the knowledge learned in the chapter to answer the question, "How does the sundew plant thrive in its environment?"

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- 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.
- Throughout the lessons within the chapter, students are directed back to the phenomena video at the beginning of the chapter and are asked 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 8, students are given the scenario, "Three friends were talking about making mixtures. They each had a different idea about what happens when two substances are stirred together, but not chemically combined." Students read through the three perspectives 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. In the Teacher's eBook, teachers are given the TEKS progression and are guided 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's 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 4.1 on Stars, the lesson objective is that "Students describe the life cycle of stars and use the H-R diagram to compare and classify those stars."

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- 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.

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

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 the Teacher eBook, Grade 8, the big idea of Chapter 2 is that “forces and motion within a system are related through Newton's three laws of motion.”
- 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.
- In Grade 8, students can “explain by modeling how matter is classified as elements, compounds, homogeneous mixtures, or heterogenous mixtures” (page 35, Teacher eBook). This vertically builds on the Teacher eBook Grade 7 content, when students can “compare and contrast elements and compounds in terms of atoms and molecules, structures, chemical symbols, and chemical formulas.”
- In the Teacher eBook, 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.”

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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 8 Chapter 3 on "Waves," 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 8.1's phenomenon shows a video describing how parts of a car work together to create the whole car. The Explore Lab then has students create a model of a cell using various materials. They present their models to the class, explaining how the parts work together to create the whole cell.
- 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 Impacts on Food Webs in grade 8 begins with a quick launch where students watch a video of a natural disturbance and then brainstorm the impacts it could have on an ecosystem. Students then complete a hands-on activity exploring and investigating the effects of resource extraction on food webs.

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 8 student materials present accurate information about ecosystems and disruptions in ecosystems, including how organisms do not switch to other

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sources of energy when there is a disruption in an ecosystem and that this could be a common misconception.

- 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 the Teacher eBook of Chapter 1 of Grade 8, students "develop and use models, conduct investigations, collect and analyze data, use mathematical calculations, and develop and communicate explanations." The theme for this chapter is centered around "matter and energy."
- 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 of the Teacher eBook.
- Materials clearly and accurately present science and engineering practices. Scientific and Engineering Practices are laid out at the beginning of each chapter on the TEKS at a Glance of the Teacher eBook.

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 8, the TEKS verbiage states that students should be able to explain the properties of water. In the "Chapter TEKS Review: Chapter 1" under Chapter 1: Chapter Wrap up and Assessment, question 3 asks students to match the property of water with its appropriate phenomena.
- 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 "forces and motion within a system are related through Newton's three laws of motion."
- The materials clearly define the boundaries of content that students must master for the grade level. For example, in grade 8, chapter 7, lesson 1, the TEKS progression states, "In Grade 6, students learned how organisms depend on and compete for biotic and abiotic factors in ecosystems 6.12A. In grade 7, students learned about energy flow within trophic levels and to describe how energy decreases in successive trophic levels in an energy pyramid 7.12A. In this lesson, students will expand on this knowledge to understand and explain how disturbances affect the transfer of energy in ecosystems."

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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.	M

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 grade-level 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

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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 8, Chapter 3: Waves, the materials state, "The following common misconceptions will be addressed in detail at the point of use in the lessons. Lesson 1- Frequency, amplitude, and wavelength are three types of waves. Lesson 2- Electromagnetic waves must travel through some kind of medium."
- 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."

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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, thinking, and acting as scientists and engineers.	M
2	Materials provide multiple opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts.	M
3	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.	M
4	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.	M

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 6, students read "Modeling Atoms and Compounds." Then, students read the diagram provided and answer the question, "What is the difference between the atoms in the solid versus the atoms in the gas?" (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 8, students are given a "Show What You Know: Safe to Swim" investigation where they "design a method for fixing the pH of swimming-pool water that is too acidic" (page 65, TEKS Lab Library: Grade 8).

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- Materials consistently support students' meaningful sensemaking. For example, in Lesson 4.1, students compare stars to see how they differ in color, size, and distance from Earth (Quick Launch: Starry Night). After discussing, students investigate the relationships between temperature, radius, luminosity, and color data (Explore Lab: Compare the Characteristics of Stars).

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 1.2, after observing cohesion, adhesion, and surface tension in water (Explore Lab: Investigate Water Properties), students read about the properties of water in their Student eBook. The text includes explanations and examples with pictures of cohesion, adhesion, and surface tension. The text prompts students to answer questions and diagram their learning on a plant graphic.
- 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 6, within a unit on living systems and the environment, there is a section called "Texas Spotlight," where students read about the diverse climates of Texas. Materials provide students an opportunity to make connections with a prompt asking them to explain how the proximity of the Gulf of Mexico influences the climate in Texas.

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 write and reflect using words or graphics. In Grade 8, students read through a "Modeling Atoms and Compounds" section. Then, students read through the diagram and answer, "What is the difference between the atoms in the solid versus the atoms in the gas?" (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

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write and reflect using words or graphics in the "Apply It" sections. In Grade 8, students examine a model and determine which model is an element and which is a compound.

- Materials provide multiple opportunities for students to communicate their thinking in written and graphic modes. In Lesson 8.2 for Grade 8, students reflect on what makes them unique in the Quick Launch. On page 150, under Dominant and Recessive Traits, students analyze a diagram of Mendel's hybrid plants over three generations and record their observations. Under Apply It, students demonstrate their understanding of the material by explaining how crossing smooth pea plants results in wrinkled pea plant offspring. Later, they analyze a pedigree and respond to a question.
- 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 4.2, during the Explore Lab, students are instructed to make a claim and collect evidence regarding how galaxies differ from one another. After reading the 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 as scientists and engineers through their development of lab investigations. For example, in Lesson 1.2, Explore Lab: Investigate Water Properties, the Open Inquiry option has students plan and conduct an investigation of their design to answer the question, "How do observable phenomena relate to properties of water?" They are given a set of materials they may use in their investigation. They are then prompted to determine a way to represent their data and 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.

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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.	M
2	Materials include embedded opportunities to develop and utilize scientific vocabulary in context.	M
3	Materials integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level.	M
4	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.	M

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 hypothesis 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.

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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 6.2, the Apply It question has students explain how human activities influence climate using the vocabulary from the unit (greenhouse gasses, deforestation, urbanization).
- 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 1.3: Acid and Base Solutions, students compare and contrast the properties of lemon juice and detergent using a pH scale graphic.
- 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: To the Sky, after completing their investigation, teachers are prompted to have students discuss which designs best meet the criteria. They are also encouraged to do a cost-benefit analysis.

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 8.1, while exploring the concept in the Explore Lab: Engineering a Cell, students make a claim and collect evidence. After completing the lab, watching a video clip, 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.

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- 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.

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

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 7.1, the Chapter Launch section contains the question, "How do you think natural disasters negatively impact ecosystems?" The sample answer states that organisms may die. If this species had low population numbers, it might not be able to come back afterward.

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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. Materials state that the teacher will introduce vocabulary words at strategic points within the learning sequence. Materials also include a vocabulary prioritization section that breaks down each term by level of importance for student understanding during the unit.

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 8, students discuss a question about a tablet of chlorine being added to a pool with a partner in Chapter 1: Properties and Conservation of Matter.
- 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 4.3, 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.

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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 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 the Lesson 4.3 Explore section, students are asked about what elements they think are most common in the universe to prompt a discussion to elicit prior knowledge. A little further in the section, they are encouraged to jot down notes in their Science Notebook over a video the class watches and also to answer a given prompt regarding how the cosmic microwave background changed over time.
- 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.

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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.	M
2	Materials assess all student expectations over the breadth of the course and indicate which student expectations are being assessed in each assessment.	M
3	Materials include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts.	M
4	Materials include assessments that require students to apply knowledge and skills to novel contexts.	M

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 3.2 within the Student eBook, there are 3 “Apply It” sections. One of these prompts students to explain how electromagnetic waves are used in healthcare. 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 6.1 under Evaluate, a pre-made online assessment titled Lesson Review with six questions (3 short answer and 3 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 or place in space, grade 8. The teacher poses questions about the main topic in this lesson, galaxies, such as “What are galaxies made of?”, “How do they differ from nebulae?”, “Can you determine if the photo on this page is showing a galaxy or a nebulae?”
- 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

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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 6 Show What YOU Know: Climate Influences, the Teacher Support document shows that the assessment covers science and engineering practices TEKS 8.1A, 8.1B, 8.1C, 8.1D, 8.2A, 8.2D, and 8.3B. It also covers recurring themes TEKS 8.5D and 8.5G. The scientific concepts covered are 8.11A, 8.11B, and 8.11C.
- 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

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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 8.3, students explore structural adaptations through a digital simulation. They model adaptations that would allow an organism to survive in a changing environment. Students then gather information from the text and engage in classroom discussions over the material. The Elaborate section also introduces students to animals found in Texas and their adaptations. After, they analyze two different environments and determine which they think Mexican free-tailed bats would be more reproductively successful in.
- 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 8, chapter 6, students are asked to “List three pieces of evidence of recent climate change. Propose one individual action you can take to reduce the emission of greenhouse gases and one action that your community could take.
- 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.

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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 responses.	M
2	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.	M
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.	M

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 evaluation 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.

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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

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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 8, materials include a formative assessment evaluating what students understand about weather and climate. In the assessment, if students do not correctly answer the question, the teacher is given guidance to address student learning gaps. For example, “...if students did not correctly answer question 2, have them reread Global Wind Belts in Lesson 2.

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Indicator 6.3

Assessments are clear and easy to understand.

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

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 8, Chapter 6, the big idea is "Natural events and human activity can impact climate." The Chapter 6 summative assessment contains questions directly related to impacts on global climate.
- Assessments contain items for the grade level or course that avoid bias. Formative and summative assessments include assessment items that present content and examples fairly and impartially 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 8, formative assessments equally present male and female names as well as names from different origins. For example, in grade 8, chapter 8, lesson 3, the question uses the names Magda and Ross.
- 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 8, a formative assessment after completing lesson 1, Chapter 8, about cell organelles, 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 identify which organelles are responsible for structure and protection in plant and animal cells instead of asking for organization and protection in plant and animal cells.

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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 8 materials contain graphics showing atmospheric carbon dioxide concentrations using a more complex line graph.
 - For example, grade 8 assessment items contain a weather map that clearly shows the location of different fronts driven by global patterns of atmospheric movement throughout the United States.

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, 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 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

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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.

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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 students who have not yet achieved grade-level mastery.	M
2	Materials provide enrichment activities for all levels of learners.	M
3	Materials provide scaffolds and guidance for just-in-time learning acceleration for all students.	M

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 8, the teacher can “have pairs of students use small spheres in a plastic bottle or a similar container to model and describe the three different states in which an element can be found and the changes required to convert one state to the next” (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 5.2, In the Engage section, three sentence stems are provided to help students answer the Essential Question. (In the first trial, the line was..., In the second and third trials, the line was..., and The curved lines represented...)
- 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.

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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 6, 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 28 TEKS Lab Library: Grade 8).
- 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 6.2, students investigate the types of climates across Texas and use this information to explain the differences in different wetlands. Time permitting, they present their findings to the class.
- 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 8, teachers can “have students research the source of some of the air pollutants responsible for acid rain and summarize this information on potential online posts or infographics” (page 54, 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.

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Indicator 7.2

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

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

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 4.1 on Stars, the Texas Spotlight section explains how the Otto Struve Telescope, now at The University of Texas, has been used to discover new objects in space.
- 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

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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 8, 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 partner interactions within the “Foster interactions” sections. In Grade 8, teachers are advised to allow EB/EL students to work in small groups with native and bilingual English speakers (page 54, 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 8, 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 you use models to classify a substance as an element or a compound; 2) a guided inquiry where students are given steps to follow to discover the answer to the question: How can you use models to classify a substance as an element or a compound; 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 28 TEKS Lab Library: Grade 8).
- 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

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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.

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

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 8, teachers are given EB/EL support for beginners, intermediate learners, and advanced/advanced high learners after students have read about unseen adhesion (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 include 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.

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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 partner interactions within the “Foster interactions” sections. In Grade 8, teachers are advised to allow EB students to work in small groups with native and bilingual English speakers (page 54, 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 non-transferable 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.

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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 the program.	M
2	Materials provide information to be shared with caregivers for how they can help reinforce student learning and development.	M
3	Materials include information to guide teacher communications with caregivers.	M

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 8, 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 8, 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 8, parents are given the activity to “help your child pick an interest of theirs and research problems that scientists have worked to design solutions for in the past or are currently working to solve.” Parents encourage their students to use key vocabulary terms within the unit, including effectiveness, cost, and trade-offs.

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- 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 Chapter 4: Our Universe, the family makes a model of the universe using dark paper or cloth and salt. Question prompts are included to engage their students in the model.
- 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 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.

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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.	M
2	Materials provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts.	M
3	Materials provide review and practice of knowledge and skills spiraled throughout the year to support mastery and retention.	M

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, along with the lab(s) that cover those TEKS. For example, in the TEKS Correlations: Grade 8 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 shows which lesson the TEKS will be included.
- Materials provide a lab library of TEKS-aligned scope and sequence that outlines in detail the “TEKS Focus in this Lab” section for a specific lab in a specific chapter. Teachers can reference the “TEKS Correlation: Grade 8” document that outlines each TEKS and is specific in which chapter(s) and lab(s) to focus on. For example, in grade 8 Chapter: Scientific and Engineering Practices, there are 6 periods given or 3 blocks given to Lesson 1: TEKS 8.1A, 8.1H, 8.2A 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

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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 8.13B on Cells and Inherited Traits, the TEKS Progressions indicate students have some exposure in grades 6 and 7 with TEKS 6.13B and 7.13B.
- 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.

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Indicator 8.2

Materials include classroom implementation support for teachers and administrators.

1	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.	M
2	Materials include standards correlations, including cross-content standards, that explain the standards within the context of the grade level.	M
3	Materials include a comprehensive list of all equipment and supplies needed to support instructional activities.	M
4	Materials include guidance for safety practices, including the grade-appropriate use of safety equipment during investigations.	M

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, there 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’s 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.

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- 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 8: Content Correlations,” Math standards are given for various chapters and lessons. TEKS 8.1A, 8.1D for Math correlates to Grade 8, Chapter 4, Lesson 1: 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 8” document, there is a list of all materials needed under the Plan section.
- Under Program Resources in the “TEKS Lab Library: Grade “ document, there is a list of alternative materials under the Plan section. Therefore, if the regular materials are unavailable, alternative options exist.
- 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 4.2, Teacher Support Explore Lab: Categorize Galaxies, materials are listed for the investigation: a poster board (11”x17”), colored pencils, and internet access.
- Student Labs provide a materials and equipment list. For example, the Resources tab for Chapter 4, Lesson 4.2, Explore Lab: Categorize Galaxies file (student file) includes a bulleted list of the materials needed for the investigation: a poster board, colored pencils, and internet access.
- The materials required for the lesson can be found in the Teacher’s Quick Launch for each lesson in each chapter. For example, in Grade 8, Chapter 2, under “Quick Launch,” it states, “Gather materials needed for this activity. Materials are listed in the Quick Launch teacher material.”

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- 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.

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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 on required time for lessons and activities.	M
2	Materials guide strategic implementation without disrupting the sequence of content that must be taught in a specific order following a developmental progression.	M
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 8” 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 35 minutes for instruction and 10 additional minutes for assessment. Days 2 and 3 are for the Explore/Explain piece: 125 minutes for instruction 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,

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in “Chapter 1: Lesson 1.1 TEKS 8.6A,” the Lesson Overview section describes the TEKS progression in grades 4–8. This 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 8,” the total periods for the program equals 170 periods or 90 blocks. The course cannot be completed within one school year. The number of periods exceeds most school calendars.
- 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.

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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 does not distract from student learning.	Yes
2	Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting.	Yes
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.

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- 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 8 models of cell structures appear simpler and less detailed than those in high school biology materials.
- Student eBook materials include detailed visuals with accurate labels. Grade 8 materials in Chapter 8 include labeled graphics depicting genes being a part of a chromosome that is found in the nucleus.
- Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, grade 8 materials include a graphic that shows the different climate zones and where they are found.
- Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting. For example, in the grade 8 student ebook, page 144, there is an activity observing the plant cell, and students are directed to circle the cell membrane and cell wall.
- 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 component 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.

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

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.
- Materials integrate digital technology and tools that support student learning and engagement. The Student eBook enhances learning through such features as interactives, simulations, videos, and online assessments.
- An additional example is that student digital components include embedded tools, such as note-taking, variable font size, text-to-speech, annotations, and highlighting.
- Materials integrate digital technology and tools that support student learning and engagement. For example, materials provide guidance for integrating digital technology and tools in whole group, small groups, 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.
- The materials provide engaging phenomena videos and lab simulations for students, as well as planning resources for teachers

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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.
- 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, in Chapter 6 of the Student eBook, students describe the cause-and-effect relationship that occurs when the shape of Earth's orbit is more elliptical. In addition, materials provide opportunities for students to obtain, evaluate, and communicate information using digital tools. In grade 8 materials integrate an online interactive gallery “storage space” to see other ways that scientists are speeding up the natural processes that store carbon.
- Materials integrate digital technology in ways that support student engagement with the recurring themes and concepts. For example, grade 8 materials provide a virtual lab that investigates biodiversity in the schoolyard. The students will calculate the biodiversity index of the local ecosystem and use scale, proportion, and quantity.
- The materials 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. 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 integrate digital technology that provides opportunities for student-to-student collaboration. For example, materials include digital activities that encourage collaboration through simulations, virtual labs, and interactive case studies.
- The 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. For example, all of the materials and assessments are accessible via Google Chrome or any other web browser. Materials are accessible online through any device with internet access, including Chromebooks, iPads, PCs, iMacs, and smartphones.
- The materials are available for easy download and are editable. This includes labs, letters home, and assessments.

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- 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.

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

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.
- The 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

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student learning through digital technology. This includes LearnSmart adaptive tools to help students learn.

- Materials provide teacher guidance for the use of embedded technology to support and enhance student learning. Program Resources include Universal Teacher Support Strategies, as well as Professional Development for Assessments. 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.
- Materials provide teacher guidance for digital and online assessment tools within the assessment guide. The guidance includes tips for how teachers can monitor student progress and evaluate the effectiveness of the technology.
- Some examples of embedded technology support include 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 8, 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 8, 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.
- In addition, 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.