School-It! 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 8	57.14%	57.14%	100%	100%

Section 2. Instructional Anchor

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

Section 4. Productive Struggle

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

Section 6. Progress Monitoring

- The materials include some variety of TEKS-aligned and developmentally appropriate assessment tools.
- The materials do not include guidance that explains how to analyze and respond to data from assessment tools.
- The assessments are somewhat clear and easy to understand.

Section 7. Supports for All Learners

- The materials do not provide guidance on fostering connections between home and school.
- The materials include some listening, reading, writing, and speaking supports to help Emergent Bilinguals meet grade-level science content expectations.
- The materials do not include a variety of research-based instructional methods that appeal to a variety of learning interests and needs.
- The materials do not include guidance, scaffolds, supports, and extensions that maximize student learning potential.

Section 8. Implementation Supports

- The materials include year-long plans with some practice and review opportunities that support instruction.
- The materials include some classroom implementation support for teachers and administrators.
- The materials do not provide implementation guidance to meet variability in program design and scheduling.

Section 9. Design Features

- The visual design of materials is mostly clear and easy to understand.
- The materials are not intentionally designed to engage and support student learning with the integration of digital technology.
- The digital technology or online components are not developmentally and grade-level appropriate and provide support for learning.

Section 10. Additional Information

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

Indicator 2.1

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

1	Materials provide multiple opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate scientific and engineering practices as outlined in the TEKS.	PM
2	Materials provide multiple opportunities to make connections between and within overarching concepts using the recurring themes.	DNM
3	Materials strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS.	PM
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.	PM

Partial Meets | Score 2/4

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

Materials sometimes 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 do not provide multiple opportunities to make connections between and within overarching concepts using the recurring themes. Materials sometimes strategically and systematically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS. Materials sometimes 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 sometimes provide opportunities for students to develop, practice, and demonstrate mastery of grade-level appropriate SEPs as outlined in the TEKS.
- The material has a Unit that covers the Scientific Method. The Unit includes using observable phenomena to ask questions with some examples of those questions given. The Unit begins with students learning about "asking questions" in which students are given a scenario of a real-world phenomenon (Scenario A) to read. Upon completion of the reading, the students must "ask a question." Students then read Scenario B about a pond ecosystem that appears murky and has an unpleasant odor before asking a question, hypothesizing, listing materials needed for the experiment, and then designing an experiment.

- The material also identifies the Unit's Lab Safety and Tools as SEPs Units. The Units present PPE and tools students commonly use in a laboratory setting. The materials do provide some opportunities to communicate information either through discussions or writing.
- In the Classifying Matter Unit, students discuss and provide evidence on how to classify the mixtures presented in the Unit as either homogeneous or heterogeneous.

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

- Materials do not provide multiple opportunities to make connections between recurring themes or overarching concepts. For example, material chapters are grouped together by assumed areas of focus, such as the nature of science, matter, force and motion, earth and space, and environment and organisms. There are no themes that connect the units.
- For example, within each assumed area of focus, there are no themes or concepts connecting the chapters or lessons within the areas of focus. The lesson TEKS 8.6A Classifying Matter begins with a focus question "How do we categorize things." The next lesson, which is TEKS 8.6B Identifying Atoms in Reactions, begins with the focus question, "How can we identify something unknown." These two lessons and focus questions make no connection with each other, the body of the lessons or an overall theme or concept.

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

- Materials sometimes strategically develop students' content knowledge and skills as appropriate for the concept and grade level as outlined in the TEKS. For example:
 - o In the Acids and Bases Unit (8.6A), students ask questions and reflect on their knowledge of Acids and Bases. They expand their knowledge by studying the pH scale to develop more understanding of Acids and Bases. There are True or False and Discussion questions within this lesson. Two examples are comparing Lemon Juice pH to Water pH and asking which one is more acidic, and showing a list of three solutions for students to select which is the most acidic.
 - In the Adaptations Unit, students develop knowledge and skills with a writing activity
 posing the opinion "Change is Always Good" and whether they believe it to be true or
 not. This writing prompt is then extended with a pair/share activity with peers to create
 more strategic learning regarding adaptations and changes in a population or
 ecosystem.
 - In the Weather Maps lesson (8.10 C), vocabulary words like precipitation, pressure system, low pressure, and high pressure are introduced along with their definition. However, the material does not strategically extend the lesson in order for students to retain their learning.
 - In the Identify Atoms in Reactions lesson, the vocabulary word 'periodic table' has the definition but lacks the actual image of the periodic table.
- Materials do not systematically develop student content.
 - For example, the table of contents appears to separate each chapter into assumed areas
 of focus. These areas of focus by anything other than a number. The focus area labeled
 "0" contains the chapters titled "Scientific Method," "Laboratory Safety," and "Tools."
 - For example, the focus area labeled "1" contains such chapter titles as "Classifying Matter," "Identifying Atoms in Reactions," and "Cohesion, Adhesion, & Surface

Tension." There is no explanation for the rationale for the sequence of units, showing how the program systematically presents content and concepts for students to make connections across units throughout the program.

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 sometimes include opportunities in limited detail for students to ask questions and plan and conduct investigations.
- Materials sometimes make connections across disciplines.
 - In the Scientific and Engineering Practices Unit (1 A/B) in the Scientific Method Lesson, students ask questions about temperature, designs of turbines, and impacts of deforestation during the creation of the Scientific Method setup.
 - In the Matter and Energy Unit, TEKS 8.6A Classifying Matter lesson, students make a model of a heterogeneous and homogeneous mixture. Students ask questions regarding the mixtures but are not offered sufficient opportunities to make connections across content to develop their understanding.
 - The material has a Unit Lesson that covers the Scientific Method, which includes using observable phenomena to ask questions with some examples of questions. After each part of the scientific method, students are asked a question and then work through the scientific steps. One scenario, Scenario B, is about a pond ecosystem that appears murky and has an unpleasant odor.
 - In the Unit Matter and Energy (8.6E) Mass Conservation, the material takes students through a step-by-step process to develop their understanding of how balancing a chemical equation relates to the Law of Conservation of Mass.
- At the beginning of each lesson, there is a writing prompt for students and some guided
 questions to help teachers facilitate. Though most of the writing prompts are geared toward the
 content, some prompts are not.
 - In the Mass Conservation lesson (8.6 E), the question posed for the students is to reflect on the statement, "Karma balances out every bad action." There is no definition of karma provided in the teacher or student references.
 - In the Identify Atoms in Reactions lesson, the students write about how they can
 identify something unknown. The prompt further helps them to go into the scientific
 process and research, thus allowing more exploration into the topic. There are no
 further plans or steps on how to investigate.

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.	DNM
2	Materials intentionally leverage students' prior knowledge and experiences related to	PM
	phenomena and engineering problems.	
3	Materials clearly outline for the teacher the scientific concepts and goals behind each	DNM
3	phenomenon and engineering problem.	

Partial Meets | Score 2/4

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

Materials do not 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 sometimes leverage students' prior knowledge and experiences related to phenomena and engineering problems. Materials do not 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 do not embed phenomena and problems across lessons to support students in
 constructing, building, and developing knowledge through recurring themes and concepts. For
 example, materials include stand-alone themes and concepts within separate Units. In the
 Heterogenous and Homogenous Mixtures Lesson, the concept of heterogenous and
 homogenous mixtures is only mentioned in the lesson in which it is introduced and not
 mentioned in any other lesson or Unit in the material.
- Materials include basic building of knowledge through minimal application. In the
 Heterogeneous and Homogeneous Mixtures Lesson, students are developing some knowledge
 by reading the information given by the text and using images of the mixtures as a visual to
 make connections. This application is not authentic and does not support embedding
 phenomena and problems.
- Materials include two open-ended questions at the end of each Unit. At the end of the Classifying Matter Unit, the questions are "Brainstorm all of the everyday items around your house that can be classified as elements, compounds, homogeneous mixtures, or

heterogeneous mixtures." and "You've discovered a magical potion that can separate any mixture into its individual components. How would you use this potion to help solve a real-world problem?" The material does not embed phenomena and problems across lessons to drive student learning in constructing, building, or developing knowledge through authentic application and performance of scientific and engineering practices or 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.

- The material offers some entry points to learning but fails to address potential areas of misunderstanding for all lessons.
 - In the Classifying Matter lesson, students are asked to write a brief response to the question, "How do we categorize things?" Students are then asked to think about different ways they categorize things in their daily life.
 - In the Matter and Energy Unit (8.6) Classifying Matter Lesson, students use an extension activity to relate to prior experiences with other substances that would dissolve in water. Students do not, however, use this knowledge or experience in relation to phenomena or engineering problems.
 - In the Identifying Atoms in Reactions (8.6B) Unit's sharing and reflecting section, students are asked to relate prior experiences with unknown objects and classify those objects. There is no evidence of a relation to engineering problems.
 - o In the Matter and Energy (8.6B) Unit Lesson for Identifying Atoms in Reactions, students use prior knowledge to answer the question, "How can we identify something unknown?" The teacher directs students to "think about investigative processes, research methods or resources they might use to gather information and make sense of unfamiliar things." In the next lesson on Cohesion, Adhesion, and Surface Tension, the writing tasks students to think about "What makes water so special?"
 - o In the Acids and Bases Lesson, students explore the concept of categorization and how it helps make sense of the world. The writing feature asks students to provide examples from their own experiences and observations to write about the prompt, "Everything is either black or white, there is no middle."

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

- Materials do not clearly outline the scientific concepts and goals behind each phenomenon and
 engineering problem for the teacher. It also does not identify student learning goals behind each
 phenomenon and/or engineering problem. Materials include a table of contents that lists
 scientific concepts and standards to be covered throughout the year. Materials include scientific
 concepts explained in the introductory texts of each lesson, but the materials do not include the
 goals behind these concepts.
- Materials provide sample responses to the few questions within the text. For example, in the Lesson Identify Atoms in Reactions, the On-Track question is "What is the difference between an element and a compound?". The sample response is, "An element is made of just one type of atom, and a compound is made of two or more different types of atoms joined together."

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

Partial Meets | Score 3/6

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

Materials are not vertically aligned or designed for students to build and connect their knowledge and skills within and across units and grade levels. Materials are sometimes sequenced to scaffold learning in a way that allows for increasingly deeper conceptual understanding. Materials do not clearly or accurately present grade-level-specific core concepts, recurring themes and concepts, and science and engineering practices. Mastery requirements of the materials are not 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 do not provide vertical alignment across grade levels, as only the Grade 8 product is available. There are some concepts where ideas build from simple to complex; however, in many instances, these ideas look very isolated and disconnected. For example, the lesson Newton's Second Law discusses the different forces, and then it introduces mass and acceleration. The lesson gradually builds up on the required TEKS 8.7A (calculate and analyze how the acceleration of an object is dependent upon the net force acting on the object and the mass of the object using Newton's Second Law of Motion).

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

Material is sequenced for a somewhat meaningful flow of concepts. Very few examples can be
found in the product in which the materials provide a progression of concrete and then
representational before abstract reasoning when presenting concepts. The structure of content
does not allow for eliciting prior knowledge or building upon prior knowledge through
exploration before explicit teaching occurs.

- For example, in the Classifying Matter (TEKS 8.6A) Unit, the text uses pizza as a heterogeneous mixture, with a picture of oil with water used later in the Unit to illustrate the concept of heterogeneous mixtures. However, this is the exception in the text, not the norm.
- For example, in the Cohesion, Adhesion, and Surface Tension Lesson, the students are
 introduced to the concept of water molecules by asking them about professional divers diving
 during the Olympics and how they place their hands, and what happens when they dive in the
 water. The Materials do not fully encompass intentional sequencing to scaffold learning.

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

 Materials do not present grade-specific core concepts, recurring themes and concepts, or science and engineering practices. The core concepts are specific. For example, in the Unit Lesson Biodiversity, the concept of diversity and its impact on ecosystems is presented. The subtitle for the Unit is "Having lots of plants and animals is a good thing." The text defines biodiversity and states, "A diverse range of species helps to balance ecosystem functions, such as nutrient cycling and pest control, and increases the ability of the ecosystem to recover from disturbances."

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

Materials do not provide students with learning targets, nor do the materials define the
boundaries of the main concepts that students must master for the grade level. Materials
consistently include opportunities for students to answer true/false questions about the science
concept being presented. For example, in the Unit Organisms and Environments Lesson,
Biodiversity, students are to respond as either true or false to the question: Biodiversity is only
found in tropical rainforests and coral reefs.

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.	DNM
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.	PM
3	Materials explain the intent and purpose of the instructional design of the program.	DNM

Partial Meets | Score 3/6

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

Materials do not 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 contain some 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 do not 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 do not provide teachers with instructional support materials that guide the development and understanding of vertical or horizontal alignment, grade-level content, SEPs, and/or RTCs.
- Material has limited times in which the student is directed to recall previously learned material (prior knowledge). For example, in the Biodiversity Lesson, students are asked to "Remember the taxonomic system used to classify and categorize organisms based on group similarities and differences." The text goes on to give a brief description of the taxonomic categories Domain, Kingdom, Phylum, Class, Order, and Family.

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 do not have background information specific to teacher use. Materials do not support teachers in developing their own understanding of more advanced, grade-level concepts. There are true/false questions that can provide scientifically acceptable explanations to some

- misconceptions; however, these are not explicitly identified as misconceptions and do not help teachers effectively address student misconceptions.
- For example, the Classifying Matter Unit contains explanations of heterogenous and homogenous mixtures and has examples of each but does not provide misconceptions.
- For example, in the Earth and Space Unit Weather Maps Lesson, the product provides an example of a stationary front in the text and includes a weather map to illustrate the written example. In the Weather Maps Lesson, the text identifies that a common misconception is that global patterns directly determine local weather.

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

- Materials do not provide a purpose or rationale for the instructional design of the program.
 Furthermore, it does not provide a framework explaining the main intent or goal of the product.
 There is no rationale for the selection of instructional design as a means of teaching science.
- Materials include very limited guidance for the teacher as a facilitator. Each unit has teacher
 guidance for a vocabulary-building activity. This activity is the exact same for each unit and
 consists of teachers leading the students through the following: repeating each vocabulary word
 out loud three times, using the Frayer model to define, explain, and draw vocabulary, and finally
 expressing the words non-linguistically.

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

Partial Meets | Score 2/4

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

Materials sometimes support students' meaningful sensemaking through reading, writing, thinking, and acting as scientists and engineers. Materials provide some opportunities for students to engage with grade-level appropriate scientific texts to gather evidence and develop an understanding of concepts. Materials sometimes provide 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 do not 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.

- There is plenty of text for students to read and write, and materials provide a consistent writing
 component at the beginning of each unit; however, it is missing consistent opportunities for
 students to think and act like scientists (trying to answer scientific questions and solve
 engineering problems).
- In the Law of Conservation of Mass Lesson, students read about the law of conservation of mass and then write an answer to the question, "What would happen if all the chemical reactions on the Earth stopped?"
- In the Identify Atoms in Reactions Lesson, students write, "How can we identify something unknown?" The material directs the students to think about the investigative processes as they write.

- Materials provide a reading in the form of a textbook that covers science concepts with illustrations over the TEKS. After reading about a science concept, the material provides discussion questions to connect the concept with student learning.
 - o In the Force, Motion, and Energy Unit, after students read about velocity, they are given three scenarios and discuss, "Why is it changing its velocity?" for each example. One such scenario in the text is as follows: A toy car is pushed very hard. The toy speeds up, and then friction makes it stop. Why does the car's velocity change?
- In the Force, Motion, and Energy Unit, students are to think and write about the following: 1) Suppose there was no friction between a soccer ball and the ground; how would this affect the game in terms of Newton's laws of motion? 2) If you were riding a skateboard and suddenly hit a rock, what would you experience in terms of Newton's three laws of motion?

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 some opportunities for students to develop a basic understanding of the science concepts from the text and to use that information to answer basic questions regarding the text.
- In the Weather Maps Lesson, students are introduced to key vocabulary terms in bold. Students can make a Frayer Model with the vocabulary terms.
- In the Identify Atoms in Reactions Lesson, students read about chemical reactions and formulas. Students then use this information to identify the parts of a chemical equation. Students also answer a true/false question in which they must identify the reactants in an equation and respond to one discussion question asking the student to identify how many different atoms are in the chemical formula.
- In the Classifying Matter Unit, students read about mixtures and pure substances and then answer a question: True or False Mixing Salt and Sugar creates a homogeneous mixture? Students then look at a before picture, a glass with only water, and an after picture of a glass with oil and water. Students then identify which glass contains a heterogeneous mixture.

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.

- Students are provided with some opportunities to engage with written or graphic modes of communication. Although there are some opportunities for students to answer questions in complete sentences, these do not allow for "students to communicate thinking on scientific concepts in written and graphic modes."
- In the Law of Conservation of Mass Lesson, students read about the law of conservation of mass and then write an answer to the question, "What would happen if all the chemical reactions on the Earth stopped?."
- In the H.R. Diagram (#2) Unit, the material prompts students to write down the vocabulary words with a definition and a sentence.
- At the end of the H.R. Diagram (#2) Unit, two questions are presented to the students. Only one
 of the two questions is relevant to student learning, in which students respond to the following
 question: "What would a white dwarf star's position on the Hertzsprung-Russell diagram tell us
 about its characteristics?"

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.

Materials do not provide opportunities for students to engage in phenomena nor to
productively struggle through the engineering design process to make sense of concepts. The
concepts are simply presented through explanatory text and pictures. Science investigation
opportunities are not part of the materials.

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

Partial Meets | Score 2/4

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

Materials sometimes prompt students to use evidence to support their hypotheses and claims. Materials include some embedded opportunities to develop and utilize scientific vocabulary in context. Materials do not integrate argumentation and discourse throughout to support students' development of content knowledge and skills as appropriate for the concept and grade level. Materials do not 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.

Evidence includes but is not limited to:

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

- Materials provide some prompts to guide students in using evidence to support their hypotheses and claims.
 - o In the Kool-Aid experiment in the Matter and Energy Unit, students are prompted to collect evidence to determine which is the most concentrated. Materials only prompt students to brainstorm on how to set up the experiment. Materials do not include the collection of evidence. Students brainstorm how to set up the investigation but then do not conduct the experiment or collect data to support the hypothesis or claims.
 - In the Newton's Laws of Motion Lesson, students are asked the question, "Suppose there was no friction between the soccer ball and the ground; how would this affect the game in terms of Newton's laws of motion?" The question provides a sentence stem to help students start out the claim.
 - In the Classifying Matter (Matter and Energy) Unit, the material asks students to classify air, cake mix, and salad as either homogeneous or heterogeneous mixtures. Students are to support their classification and provide an explanation to back up their choice.
 Materials do not include investigations in which to gather evidence. It does have

students answer questions that could be viewed as the student making a claim, but the Materials do not refer to this as "making a claim."

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

- Materials provide some opportunities to develop and utilize scientific vocabulary. For example, materials use scientific vocabulary to label a surface, cohesion, and adhesion diagram in the Matter and Energy (TEKS 8.6) Unit.
- There are vocabulary activities at the beginning of every chapter; these activities are very general suggestions and do not refer to the vocabulary words in the context of the lesson. Students say the vocabulary words, which are all in bold throughout the lesson, aloud three times, use the Frayer Model, and express the word non-linguistically by acting it out or using gestures to convey its meanings.
 - In the Acids and Bases Lesson, students focus on vocabulary words like pH scale, neutral, slightly basic, slightly acidic, acids, and bases. Students are prompted to discuss the question, "Which of the substances is slightly acidic; clean rain 5.6pH, milk 6.8pH, blood 7.1pH?"
 - In the Organisms and Environments (TEKS 8.13) Unit sidebar is a vocabulary activity where students identify bold text as the unit's vocabulary terms, say the vocabulary word out loud three times, and use the Frayer Model to guide understanding with definitions and a drawing.
 - o In the Earth and Space (Origins of the Universe) Unit, students are to write the definition, a sentence, and a drawing representing the vocabulary, such as galaxy, irregular galaxy, elliptical galaxy, and spiral galaxy. After reading and writing about the types of galaxies, the material provides the student an opportunity to match the "corresponding center and shape stickers" with the correct galaxy. They are also to respond to two questions about galaxies: what are the three main types of galaxies, and which galaxy type typically has a prominent central bulge and spiral arms? The opportunities do not cover all vocabulary terms for the unit. For example, in the same unit, the vocabulary terms Coriolis Effect, Global Winds, convection, local winds, and global conveyor belt are in the text, but the material provides no other opportunities to develop and use these words.

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

Materials do not integrate argumentation and discourse in the lessons to support students'
development of content knowledge and skills as appropriate for the concept and grade level.
Materials have limited opportunities to discuss some topics, such as those found in the Earth
and Space Unit, in the Discuss section. Students are to discuss "Which natural event(s) would
cause a decrease in global temperatures?" Materials ask students to explain their responses.
This Discuss section was the exception, not the norm throughout the product.

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 do not provide opportunities for students to construct and present developmentally
 appropriate written and/or verbal arguments that justify explanations of phenomena and
 solutions to problems.
- In the Kool-Aid experiment in the Matter and Energy Unit, students are provided with opportunities to verbally express how to set up this investigation to see how concentrated Kool-Aid is. Students express verbally how to use the cups to create various concentrations with water and Kool-aid. Materials do not include a written or verbal argument/claim during and after the collection of evidence from the Kool-Aid concentration experiment, so students are unable to justify their explanations of phenomena or solutions to problems.
- Materials have opportunities for students to answer two open-ended questions at the end of each unit. In the Natural Events on Climate Change Lesson, students are to write a response to two questions: if you were a greenhouse gas, what role would you play in climate change, and how is a volcanic eruption like a big blanket for the Earth? For both questions, the students are given a sentence starter. Sometimes the question is a "how would you feel?" type of question that the student would not need a scientific response or evidence. In the Disruptions to Food Webs Lesson, one of the two questions is, "How would you feel if you were a species whose habitat was being destroyed by human intervention?" Materials do not include investigative opportunities, so no evidence is acquired to make an argument.

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	PM
+	questioning to deepen student thinking.	
2	Materials include teacher guidance on how to scaffold and support students'	DNM
2	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	DNM
3	students in using evidence to construct written and verbal claims.	
	Materials support and guide teachers in facilitating the sharing of students' thinking and	DNM
4	finding solutions.	

Partial Meets | Score 2/4

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

Materials provide some teacher guidance on anticipating student responses and the use of questioning to deepen student thinking. Materials do not include teacher guidance on how to scaffold and support students' development and use of scientific vocabulary in context. Materials do not provide teacher guidance on preparing for student discourse and supporting students in using evidence to construct written and verbal claims. Materials do not 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.

- Although materials provide anticipated student answers to some of the questions, there is no guidance for teachers on the use of questioning to deepen student thinking.
- For example, in the Matter and Energy Unit 8.6B, the material includes basic student questions, such as "If you were a detective solving a chemical reaction mystery how would the periodic table help you identify the substances involved?" This question is a basic recall of the lesson question and does not anticipate student responses or further student thinking.
- Materials provide anticipated student responses to some open-ended questions. For example, the extension questions in Newton's Three Laws of Motion Lesson provide anticipated student answers. Materials do not provide anticipated student answers for open-ended questions in the Discuss section.
- The questions the material uses often only require minimal thinking, as defined by Bloom's
 Taxonomy. Most lessons in the materials include at least one or more true/false type questions
 in which no explanation is required by the student. For example, in Newton's Second Law of
 Motion Lesson, the true/false question is, "The Law of Acceleration has to do with an object's
 force, mass, and acceleration."
- Materials provide two open-ended questions at the end of each unit. In Newton's Second Law of Motion Lesson, the following open-ended questions are provided, along with a sentence starter

and sample response: "What would you see if you were an atom in a chemical reaction?" and "What would happen if all chemical reactions on Earth suddenly stopped?" The materials also provide in a sidebar what it refers to as "Extension" in the form of an "On-Track" and "Beyond" question. The On-track question for this Unit is, "Which object has more mass, the balloon or the bowling ball?" Students are given a picture in which both objects are on an electronic balance with the mass showing in kilograms. The materials sample response is very basic with no explanation: "The bowling ball has more mass than the balloon." The Beyond question does take the student a bit further in critical thinking and applying knowledge by asking, "How do the arrangement of particles in the balloon and the bowling ball differ, and how does it relate to their respective masses?"

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

- Materials do not include teacher guidance for scaffolding in developing scientific vocabulary in context. Materials include instructions on how to use the Frayer Model and suggest that this model is used with the bold terms in the unit. This Frayer Model instruction is consistently found in a sidebar for each unit. Materials also direct students to say vocabulary words out loud three times each within every lesson.
- For example, Newton's Second Law lesson shows vocabulary being used in the information text, and materials include vocabulary activities such as: saying the term three times out loud, using the Frayer model to draw, and encouraging students to act out to convey word meaning.
 Materials do not include teacher guidance on scaffolding students to use 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 do not provide teacher guidance on preparing student discourses nor support students in using evidence to construct written claims. Material includes verbal responses for students with questions such as "How are star life cycles similar to your life cycle?" Materials do not include teacher guidance on student discourse or allow for written responses.
- Material includes anticipation of responses in Newton's Second Law lesson activity. For example, the teacher asks students, "Which object has more mass, the balloon or the bowling ball?" and the anticipated verbal response is shown as "The bowling ball has more mass than the balloon."
- In the Cohesion, Adhesion, and Surface Tension Lesson, there is a diagram of a side view of a
 water droplet on a penny. The students must label each box with the appropriate word,
 cohesion, adhesion, and surface tension. Materials further provide a response to the question,
 'What property of water is preventing the water from spilling over the edge of the penny?'
 Materials do not provide the teacher guidance for giving feedback on student discourse, nor
 does it use evidence to construct claims.
- Material has limited opportunities to discuss some topics, such as those found in the Earth and Space Unit, in the Discuss section. Students discuss "Which natural event(s) would cause a decrease in global temperatures?" Material asks students to explain their responses. This "Discuss" section was the exception, not the norm throughout the materials. Material has a few questions for students in each unit, and a sample response is provided for those questions.

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

- Materials do not support and guide teachers in facilitating the sharing of students' thinking and finding solutions. Materials include questions in each unit with a sample response. For example, in the Waves Unit, one question within the text for student discussion is, "How do you think a surfer feels about wave amplitude?"
 - Materials also include a sidebar, at least one, for each unit in which it gives questions. These sidebar questions are labeled as "On-Track" and "Beyond." For example, in the Wave Unit, the on-track question is, "What is the main difference between the two transverse waves shown in the visual?" These questions come with a suggested response. However, there is no support or guidance for teachers in order to facilitate the sharing of students' thinking and finding solutions when it comes to these questions. The questions are simply stated with one or two sample responses provided; however, the step-by-step guidance or even a simple prompt is missing from every instance.

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

Partial Meets | Score 1/2

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

Materials include some diagnostic, formative, and summative assessments to assess student learning in a variety of formats. Materials do not assess all student expectations over the breadth of the course and do not indicate which student expectations are being assessed in each assessment. Materials do not include assessments that integrate scientific concepts and science and engineering practices with recurring themes and concepts. Materials do not 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 opportunities for formative assessment of student learning. Some examples
 of the available informal formative assessments are True/False questions, labeling diagrams,
 and short answer discussion questions. These questions can check for student understanding at
 key points during the instruction. For example, in Newton's 3 Laws of Motion Unit, the students
 read about inertia before answering a True/False question, "A dump truck has more inertia than
 a scooter." Next, the students use "more or less stickers" to show which of two objects in the
 picture (big and little rock) has more inertia.
- Materials do not include any diagnostic and summative assessments or any other formal opportunities to measure progress for student growth.

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

• Materials include TEKS-based Units where each Unit covers a specific TEKS, as noted only in the Table of Contents. The teacher can utilize the questions within the Unit as a check for understanding for that particular Unit's TEKS. For example, in the Earth and Space Unit's

- Hertzsprung-Russell Diagram Lesson, the material includes the question, "What happens to a star after it becomes a red giant or red supergiant?"
- Materials provide some questions that do not require a scientific response. For example, in the same Lesson Hertzsprung-Russell Diagram, one of the open-ended questions at the end of the Unit is, "If you were a star, what color would you be and why?"
- Materials do not indicate which student expectations are assessed for each question, and not all questions within the lessons are based on the TEKS actual content.

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

- Materials do not include assessments that require students to integrate scientific concepts and science and engineering practices with recurring themes and concepts. Materials also do not integrate RTCs in assessment. Although there are questions that imply cause and effect relationships or can involve structure and function, such as "Why do water molecules align themselves this way?", these rarely occur and are never explicit in the question, nor are they mentioned in the sample student answers.
- Materials include informal questions, but these questions do not integrate SEPs and RTCs. Some examples of informal questions include true/false, labeling diagrams, and open-ended short answer questions.

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

- Materials provide opportunities for formative assessment that assess student learning in the
 context of the current concepts discussed in each section. However, knowledge and skills are
 not applied to novel situations as the Materials do not include assessments that require
 students to apply knowledge and skills to new phenomena or problems.
- Material is not phenomena based in the instruction, and any question types found are very low level in the need for critical thinking. The questions the Materials provide throughout the units are on basic skills and knowledge that directly follow the context of the reading. For example, in the Earth and Space Lesson Unit Hertzsprung-Russell Diagram Lesson, students read about stars and how they are classified based on their colors. The text identifies the colors in order from hottest to coolest, and then students are to "place the Color Temperature stickers in the correct order under the x-axis of the HR diagram." The students simply have to look at the text above on the same page to place the stickers in the correct order.

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	DNM
-	student responses.	
	Materials support teachers' analysis of assessment data with guidance and direction to	DNM
2	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	DNM
3	instruction, intervention, and extension.	
	Materials provide a variety of resources and teacher guidance on how to leverage	DNM
4	different activities to respond to student data.	

Does Not Meet | Score 0/2

The materials do not meet the criteria for this indicator. Materials do not include guidance that explains how to analyze and respond to data from assessment tools.

Materials do not include information and/or resources that provide guidance for evaluating student responses. Materials do not 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 tools do not yield relevant information for teachers to use when planning instruction, intervention, and extension. Materials do not 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 do not provide information or resources for guidance in evaluating student responses.
 Materials provide sample student responses to the questions that appear throughout the textbook for formative assessment, but not to all.
- For example, the Organisms and Environments Unit has a true or false question: "Climate change is not considered a human disturbance to ecosystems." The sample answer provided is "False; Climate change is caused by human activities."
- For example, in the same Unit, the material asks students to "Compare the difference in energy
 of a food web to a food chain. Explain your reasoning." This question does not come with a
 sample student answer. Materials do not provide guidance in evaluating student responses to
 any of the given questions.

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 do not support teacher analysis of assessment data with guidance and direction to respond to individual students' needs in all areas of science based on student progress.
 Materials do not show student progress measuring.
- Materials provide informal assessments within each Unit, such as true/false, matching and Q & A. Materials also provide sample student answers for the questions that appear throughout the textbook; however, there is no guidance on how to assess responses given by students.

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

- Materials do not provide assessment tools that yield relevant information for teachers to use when planning instruction, intervention, or extension. Materials do not suggest ways to make instructional decisions, such as how to group students for reteaching or for extension activities.
- Materials include true/false, matching, and open-ended questions that the teacher could use, without guidance, to check for understanding as the student moves through the text of the Unit. For example, in the Cells Lesson, the material asks, "How is the cell membrane like a security guard?" Teachers could use this to determine if the student understands the function of the cell membrane and provide further instruction as needed. However, that would be of their own volition and without given guidance from the materials.

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

- Materials do not provide a variety of resources or teacher guidance on how to leverage different
 activities to respond to student data. Materials do provide direct instruction of science concepts
 followed by some type of question such as true/false, diagram labeling, or open-ended short
 response.
- Materials do not use the assessments to drive intervention or reteach students for response to learning. Materials lack activities and teacher guidance as responses to the student data.
 Materials do not include guidance on how to address gaps in learning or any follow-up resource to respond to student learning needs. Instead, materials move on to the next lesson after an assessment is given.

Indicator 6.3

Assessments are clear and easy to understand.

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

Partial Meets | Score 1/2

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

Assessments sometimes contain items that are scientifically accurate, avoid bias, and are free from errors. Assessment tools use somewhat clear pictures and graphics that are developmentally appropriate. Materials do not provide guidance to ensure consistent and accurate administration of assessment tools. Materials do not 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.

- Materials contain some scientific questions that are inaccurate and not free from errors.
 - For example, true/false questions like those found in Newton's Second Law of Motion Lesson. True or False? Force is the amount of matter in an object. The sample response answer is False: Mass is the amount of matter in an object. In Newton's 3 Laws of Motion Lesson, a discussion question states, "You are asked to move a heavy desk from one side of the room to the other. Could you describe the relationship between inertia and friction in this situation?"
 - For example, the Evaluate section of the Adaptations Lesson, includes several inaccurate statements. Materials state that cheetahs hunt in groups. This is not always the case, as female cheetahs with cubs hunt alone. Materials state that camels store water in their humps when, in fact, they store fat there. Materials state the cytoplasm is found only in plants because it is responsible for creating photosynthesis. Both statements are incorrect, as chloroplast is found only in plants because it is responsible for creating photosynthesis.
 - For example, the Classifying Matter Lesson poses the question, "You've discovered a magical potion that can separate into its individual components. How would you use this potion to help solve a real-world problem?" The question stem provided is, "I would use the magic potion to..." While this question can generate thought and discussion, it does not technically pertain to the lesson's theme, nor is it grounded in scientifically accurate phenomena.

- Materials contain some scientific questions that contain bias.
 - For example, the Earth and Space Unit has a question for students asking if they are in a town where buildings are being built and roads made for growth in population.
 Materials overly represent urban settings by not providing references to rural areas.

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

- Materials do not include formal assessments such as quizzes, benchmarks, pre-test, or summatives. Therefore, assessments, such as quizzes and summatives, cannot be evaluated for the use of clear pictures and graphics that are developmentally appropriate. Informal questions in the text rarely use pictures or graphics. When they do, the pictures and graphics are clear and developmentally appropriate.
 - For example, the question about the expansion of the universe in the Origins of the Universe Lesson refers to a graph. The graph is clear in representation and is developmentally appropriate for this grade level.
 - For example, in the Heterogeneous and Homogeneous Mixtures Unit, there are pictures
 of cups with solutions with clear images and text to indicate Kool-aid and water.
 - For example, in the Classifying Matter Lesson, easily identifiable images of air, cake mix, and salad have been provided. Students have to classify the images as heterogenous or homogenous mixtures.
 - For example, Newton's Second Law of Motion Lesson includes a simple and clear picture of a balloon and a bowling ball on a scale, with easy-to-read masses for each, for students to use when answering the question: Which object has more mass, the balloon or the bowling ball?

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

- Materials do not include guidance to ensure consistent and accurate administration of
 assessment tools. While there is no guidance, the teacher can follow the lesson flow and use the
 informal questions the material provides at each point it appears. Lessons include correct
 sample responses for most questions.
 - For example, in the Mass Conservation Lesson, a question asks if the visual shows the conservation of mass. The sample response states, "Yes, mass is conserved because the same number of atoms and grams is present on both sides."
- Materials provide answer keys that teachers can use to assess whether students were correct or not. The Acids and Bases Unit contains answer keys to matching and multiple-choice questions.
- Materials provide answers to labeling activities like those found in the Acids and Bases Unit
 Students have teacher guidance on telling them how to put stickers on the areas of the diagram
 to label as an Element or Compound correctly. However, there is no guidance from the materials
 on how teachers are to utilize this activity consistently and accurately in order to measure
 student understanding and progression.

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

 Materials do not include guidance to offer accommodation for assessment tools that allow students to demonstrate mastery of knowledge and skills aligned to learning goals. The material

- includes informal checks for understanding type questions such as true and false, matching, multiple choice, and short answers.
- One possible accommodation, though without guidance on how to properly utilize it, is the
 question stems for the open-ended questions at the end of some of the lessons. Without
 guidance or support, teachers could make modifications by shortening or rewriting questions,
 including visuals where none are provided, or creating an audio recording of the questions for
 those who need oral assessment.

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

Does Not Meet | Score 0/2

The materials do not meet the criteria for this indicator. Materials do not include guidance, scaffolds, supports, and extensions that maximize student learning potential.

Materials do not provide recommended targeted instruction and activities to scaffold learning for students who have not yet achieved grade-level mastery. Materials do not provide enrichment activities for all levels of learners. Materials do not 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 do not contain materials that provide recommended target instruction and activities
 to scaffold learning for students who have not achieved mastery. Materials include instruction
 for most students in general. Material contains a true or false question and answer section in
 the Cells Unit to check for understanding. Materials do not include supplemental activities for
 students who are struggling learners who need re-teaching.
- Materials include a vocabulary activity for each unit. It is the same activity for each unit, in
 which it has students do the following: 1) say the word out loud three times; 2) use the Frayer
 model to define the vocabulary word, use it in a sentence and then draw a picture representing
 the word; and, 3) express the word non-linguistically to convey its meaning.

Materials provide enrichment activities for all levels of learners.

- Materials do not contain resources that provide enrichment activities for all levels of learners.
 Materials include materials that provide activities for beginner learners. For example, in the
 Cells Unit, students are given prompts by the teacher to write vocabulary words using the Fryar
 method and write terms with definitions. Materials do not include materials for struggling
 learners or advanced learners.
- Materials include what is referred to as an extension. The extension is in the form of questions.
 For example, in the Lesson Origins of the Universe from the Unit Earth and Space, the Extension is as follows: 1) What is the term used to describe the shift in the wavelength of light when an

object is moving toward the observer? and 2) If you observe a star with a redshift, is the star moving towards or away from you?

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

- Materials do not provide resources that provide scaffolds or guidance for just-in-time learning
 acceleration for all students. Product does include materials for guidance for beginning-level
 learners. In the Inherited Traits unit, the product includes guidance for students in the image
 cards in that they pair and share with a partner about inherited traits.
- Materials include limited feedback in the form of a suggested answer to questions posed to students in the text. For example, in the Lesson Hertzsprung-Russell Diagram from the Unit Earth and Space (H.R. Diagram #1), a true or false question is posed: A Nebula is the force of attraction between two objects. The suggested teacher's answer is: False: Gravity is the force of attraction between two objects. Materials do not include advanced resources or a variety of student activities that provide a deeper understanding of the subject matter.

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.	DNM
2	Materials consistently support flexible grouping (e.g., whole group, small group, partners, one-on-one).	PM
3	Materials consistently support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation.	DNM
4	Materials represent a diversity of communities in the images and information about people and places.	DNM

Partial Meets | Score 1/2

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

Materials do not include a variety of developmentally appropriate instructional approaches to engage students in the mastery of the content. Materials sometimes support flexible grouping (e.g., whole group, small group, partners, one-on-one). Materials do not support multiple types of practices (e.g., modeled, guided, collaborative, independent) and provide guidance and structures to achieve effective implementation. Materials do not 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 do not provide a variety of developmentally appropriate instructional approaches to
engage students in mastery of the content. The material is mostly composed of textbook-style
dissemination of information with no videos or hands-on activities.

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

- Materials only have support for the whole group or pairing up rather than offering consistent and flexible grouping.
- In the Homogeneous and Heterogeneous Mixtures Lesson, only whole group activities are provided with images to describe the concepts.
- In the Newton's Laws of Motion Lesson, the students are instructed to form two circles, with
 one student facing and the other facing out, to form a Socratic circle, but this is again a whole
 group discussion rather than a truly flexible grouping.

- There are instances that materials suggest collaborative groups or partners only superficially.
 For example, in the Classifying Matter Lesson, materials recommend teachers to ask their students to pair up with a partner to discuss their answers to a question.
- Materials provide in each lesson a "Pairing up/Sharing/Reflecting" suggestion for the teacher to have students group a certain way once they have completed a written response. This is another way for students to discuss in pairs or as a whole group rather than true and consistent flexible grouping. For example, in the Unit Organisms and Environments in the Lesson Disruptions to Food Webs, the suggestion for grouping is to use the "Eco-Mingle" method to find a partner. The Eco-Mingle method is to move around the room like an animal of their choice (hopping bunny), and when the teacher says "connect," the students will partner up.

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

- Materials do not provide multiple types of practices, nor does it provide teacher guidance and structures to achieve effective implementation. Material does include a single approach which is collaborative with the pair/share writing activity in the Inherited Traits lesson. Students are asked to look at animal cards and partner up to share inherited traits observed on the cards.
- Materials at the beginning of each unit, opportunities for students to pair up for the purpose of sharing their thoughts on a writing prompt. For example, in the Unit Lesson H.R. Diagram #1, students are to write a brief explanation of their viewpoint on the following prompt: Every beginning has to have an end. The material directs them to pair up and share their written responses.
- Materials do not include varied types of assessments. However, it does include true or false
 questions in each unit, as well as two questions at the end of each unit. For example, at the end
 of Unit H.R. Diagram #2, one question posed is as follows: If you were a star on the HertzsprungRussell diagram, where would you want to be and why?

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

Materials do not represent a diversity of communities utilizing images, information, or places.
There are no images (or other media other than text) representing people or places. Most
questions also do not refer to people or places with specific names. One example of text
mentioning specific names of people is in the "Scientific Method" section, but it did not
represent any diversity.

Indicator 7.3

Materials include listening, speaking, reading, and writing support 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.	DNM
2	Materials encourage strategic use of students' first language as a means to linguistic,	DNM
2	affective, cognitive, and academic development in English.	

Does Not Meet | Score 0/2

The materials do not meet the criteria for this indicator. Materials do not include listening, speaking, reading, and writing support to assist emergent bilingual students in meeting grade-level science content expectations.

Materials do not include guidance for linguistic accommodations (communicated, sequenced, and scaffolded) commensurate with various levels of English language proficiency as defined by the ELPS. Materials do not 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 do not include guidance for linguistic accommodations commensurate with ELPS. Product materials do include guidance for English scaffolding and sequencing. There is very limited, non-specific guidance for teachers to assist students to develop vocabulary. The material includes sentence stems for the two questions at the end of each Unit. For example, at the end of the Organisms and Environments Unit, the sentence stem is "The cell membrane is like a security guard because..." Material also includes step-by-step instructions on how to complete the vocabulary activity, which is framed for all learners and is not identified as guidance for EB students.
- There is no evidence of 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.

Material does not encourage any strategic use of students' first language as a means to linguistic
and academic development in English. Material does include bolded vocabulary words that
might enable a student to identify the new terms easier and are usually defined for the
students. For example, in the Biodiversity Lesson, the term "biome" is in bold print, and the text
immediately defines biome as "an ecosystem characterized by specific climates, vegetation, and

animal life." Material does not include links to resources for support or audio/video clips that explain concepts in other languages.

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

Does Not Meet | Score 0/2

The materials do not meet the criteria for this indicator. Materials do not provide guidance on fostering connections between home and school.

Materials do not provide information to be shared with students and caregivers about the design of the program. Materials do not provide information to be shared with caregivers for how they can help reinforce student learning and development. Materials do not 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.

- Material does not include information to be shared with students and caregivers about the
 design of the program. Material does include the TEKS and the lessons that correspond to those
 TEKS in the Table of Contents.
 - For example, the Cohesion, Adhesion, and Surface Tension Unit covers TEKS 8.6.C. The Units always start with a writing prompt followed by a pairing up, discussion, and a share-out. In this same Unit, the writing prompt is "What makes water so special?" After this section, students read about the concept, and the unit will end with two openended type questions. Since the material is very consistent in its setup, the teacher could share the general design of the unit, albeit without prompting or guidance from the material.

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

- Material does not provide information to be shared with caregivers for how they can help reinforce student learning. Materials do include things in the textbook that can help caregivers understand what their child is learning, such as textual information and questions.
 - For example, in the Organisms and Environment Unit, students are provided with true
 or false questions and matching questions. Students' answers can be shared with
 caregivers to show their understanding of the concept. However, materials do not
 contain information on how caregivers can support their child's learning at home with
 this information.

Materials include information to guide teacher communications with caregivers.

Material does not include information to guide teacher communication with caregivers.
 Materials do contain some assessment tools, such as open-ended questions and true or false questions, that can be utilized by the teacher to communicate their child's performance with the caregivers. However, any communication with caregivers will be of the teacher's or district's own volition and standards without guidance from the materials.

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

Partial Meets | Score 1/2

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

Materials are not 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 sometimes provide clear teacher guidance for facilitating student-made connections across core concepts, scientific and engineering practices, and recurring themes and concepts. Materials do not 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 product does not include a scope and sequence; instead, the product provides a table of contents that lists the different Units with the corresponding TEKS beside the Unit title.
 - For example, the table of contents states Unit 1 Classifying Matter aligns with TEKS 8.6A.

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

- The materials provide some teacher guidance to help students make connections between recurring themes and concepts and scientific and engineering practices within specific Units.
 - For example, in the teacher resource, students read a scenario, define, and then ask a question.
 - For example, writing assignments in each Unit of the teacher resource facilitate connections to core concepts.
- The materials do not provide teacher guidance on how to connect the recurring themes and concepts from one Unit to another, as each Unit stands alone. The concept of heterogenous and homogenous mixtures is only mentioned in the Lesson in which it is introduced, Heterogenous and Homogenous Mixtures Lesson, and is not referenced in any other lesson or Unit in the material. The materials include a "Wrap It Up" section in which the concepts and/or phenomena for the lesson are summarized.

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

- The materials do not provide a review and practice of knowledge and skills spiraled throughout the year; therefore, the materials do not support student mastery and retention.
- The materials provide Unit assessments and check for understanding with student questions, True/false, and matching of vocabulary terms, but these are specific to each Unit's concept and do not spiral throughout the year.
 - In Newton's Second Law of Motion Lesson, one practice question asks students to identify if a balloon or bowling ball has more mass. Students see a picture of these two objects on a digital scale with the mass pictured in kilograms.

Indicator 8.2, Grade 8

Materials include classroom implementation support for teachers and administrators.

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

Partial Meets | Score 1/2

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

Materials do not 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 do not include standards correlations, including cross-content standards, that explain the standards within the context of the grade level. Materials do not include a comprehensive list of all equipment and supplies needed to support instructional activities. Materials include some 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 do not provide teacher guidance and recommendations for use of materials.
- Materials do not contain embedded technology or any research-based instructional strategies.
- There is minimal support for the teacher. The guidance located in the material consists of a single question to ask and sometimes a vocabulary suggestion. The teacher guidance only occurs in some provided materials in the form of text, embedded technology, enrichment activities, et al.
- Material do not include teacher guidance and recommendations or embedded technology. The
 materials include questions to assist students with basic recall of information within each Unit.
 For example, students are asked open-ended questions, true/false questions, and matching
 vocabulary terms. However, the material does not include scaffolding of these questions to
 enhance student learning.
- There is a sidebar for each Unit Lesson that poses what is referred to as an On-Track question and a Beyond question. For example, in the Mass Conservation Lesson, the On-track question is

"Does the visual representation of the balancing equation show that mass is conserved?". However, there is no guidance for the teacher in how to scaffold these questions in order to support student learning.

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

- There are no cross-content standards within the product, nor does it explain the standards within the context of the grade level.
- Materials include writing opportunities for each lesson. For example, at the beginning of the
 Electromagnetic Waves Lesson, the writing prompt is "How do we categorize things? Anything?".
 Students are also able to write using the Frayer model for vocabulary-building skills. However,
 the cross-content standards are not addressed for ELAR or any other subject. Only one specific
 science TEKS is addressed in each Lesson; for example, the Electromagnetic Waves Lesson
 covers TEKS 8.8B.

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

- The product does not provide a comprehensive list of equipment and supplies needed to support instructional activities.
- In the Lab Safety Unit, the product describes laboratory tools, referred to as "The Essentials," that will be used throughout the year. However, the product does not provide the specific tools needed for each lesson or activity, except for one statement regarding journals being needed in the laboratory.

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

In the Lab Safety Unit, safety equipment is minimally discussed. The product includes a chapter,
 Scientific Engineering Practices (1C Lab Safety), where a description of various safety equipment
 is given. but does not include how or when these tools could be used throughout the year. The
 product does not include specific guidance for safety practices for each lesson or activity.

Indicator 8.3, Grade 8

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

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

Does Not Meet | Score 0/2

The materials do not meet the criteria for this indicator. Materials do not provide implementation guidance to meet variability in program design and scheduling.

Materials do not support scheduling considerations nor include guidance and recommendations on required time for lessons and activities. Materials do not 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 not flexible and can not 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.

- The materials do not support scheduling considerations for required lessons or activity times. The only guidance or recommendations provided for the required time for lessons and activities are in the Table of Contents, where only one day is recommended for each lesson.
- Materials include introduction pages in each lesson that states "Today we are going to learn..."
 statements. For example, the first page in the Classifying Matter Unit begins with "Today we are
 going to learn..." and lists a statement about how to categorize. This is the only statement with
 any time attached to a specific Unit or lesson outside of the table of contents. Materials do not
 include specific times for individual activities, readings, or anything pertaining to the Lesson
 itself.

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

- Materials include a table of contents where each lesson and its dedicated TEKS are listed in numerical order. However, the material does not provide any suggestions for strategic sequencing of TEKS that would benefit developmental progression.
- Materials include activities that support progression specific to each lesson's concept, such as
 vocabulary building and then lesson activities to follow after the lesson introduction. However,
 these progressions are contained within each lesson and do not constitute developmental
 progression over an entire school year.

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

 Materials contain 31 lessons divided into four sections that appear to be categorized by similar TEKS. The Table of Contents states that each lesson should take one day. Since there are 31 lessons, this would indicate that it should take 31 days to complete the lessons. As most schools within Texas are in session around 36 weeks, the material can certainly be completed within one year however, the pacing is not logical for a standard grade 8 classroom.

Indicator 9.1

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

1	Materials include an appropriate amount of white space and a design that supports and	Yes
	does not distract from student learning.	
2	Materials embed age-appropriate pictures and graphics that support student learning and	Yes
2	Materials embed age-appropriate pictures and graphics that support student learning and engagement without being visually distracting.	
2	Materials include digital components that are free of technical errors.	No
3		

Not Scored

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

Materials have a visual design that is 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 do not 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 do provide an appropriate amount of white space and a design that supports and does
 not distract from student learning. Material includes white space in the margins top/bottom and
 sides. Materials also include appropriate spacing in between sentences. Materials contain a
 decent amount of pictures, diagrams, graphs, and tables that are not too crowded and easy to
 follow when reading.
- Material uses one main font for most of the text while using color and other fonts to bring
 attention to key items that the student or teacher would need to pay special attention to within
 the text. For example, colorful fonts are used in the Matter and Energy Unit subtitles to show
 elements and compounds. Fonts are simple and one style for simplicity and ease of distraction.
- All the lessons consistently follow a pattern of the vocabulary activity in the margin on the first page of each lesson. For example, in the Acids and Bases Lesson, the directions for the vocabulary activity is on the right-hand side of the page, exactly like in the Mass and Conservation Lesson.
- Extension directions for the teacher are consistently found in sidebars in the margin area and
 are in gray boxes. For example, the Extension On-Track and Beyond questions are found on the
 left margin on the same page as the subheading, Modeling Pure Substances, in the Matter and
 Energy Unit. The Extension will relate to the subheading topic.

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, in the Matter and Energy Unit,
 pictures of elements and compounds are shown in several ways using colorful pictures to
 distinguish elements from compounds.
- (Tab) For example, in Newton's 3 Laws of Motion Lesson, the materials include a simple but colorful picture showing two different size rocks (one big/one little) with the mass for each written directly under each rock. The students use the pictures to practice identifying which has more inertia using the concept that the greater mass represents greater inertia. The pictures are simple, clear, and engaging and support student learning.
- Materials consistently provide graphics for students to understand and deepen their learning.
 Materials use pictures, diagrams, and tables to communicate and/or represent various concepts,
 ideas, and events. For example, in the HR diagram Lesson, the HR diagram is color-coded with
 the temperature labels and the stars' size. The life cycle of a star is explained with images and
 labels for easy understanding. In the Origins of the Universe Lesson, to explain the Doppler
 effect, colored images are used to explain the blue and red shift to describe the movement of
 the galaxies
- Most of the pictures the material includes are for students to label with "stickers" or the student uses the graphic to answer a question about the content. For example, in Newton's 3 Laws of Motion Lesson, materials include a before and after picture of a penny resting on a notecard over a cup of water. The Extension question is, "Which of Newton's laws is demonstrated when the card is flicked, and the penny falls into the water?" The pictures/graphics are not visually distracting, and they are relevant to student learning.

Materials include digital components that are free of technical errors.

- Materials do not include digital components to look for technical errors. Materials do include a teacher edition pdf file with text and image components, which are free of technical errors.
 - For example, the teacher edition includes a table of contents and units, ES sons free of errors.
- Materials include pictures and graphics but do not include any digital components.

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	No
*	engagement.	
1	Materials integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content.	No
	science and engineering practices, recurring themes and concepts, and grade-level content.	
3	Materials integrate digital technology that provides opportunities for teachers and/or	No
3	students to collaborate.	
4	Materials integrate digital technology that is compatible with a variety of learning	No
4	management systems.	

Not Scored

Materials are not intentionally designed to engage and support student learning with the integration of digital technology.

Materials do not integrate digital technology and tools that support student learning and engagement. Materials do not integrate digital technology in ways that support student engagement with the science and engineering practices, recurring themes and concepts, and grade-level content. Materials do not integrate digital technology that provides opportunities for teachers and/or students to collaborate. Materials do not 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 do not provide digital technology or tools that support student learning and engagement. Materials provide support for student learning with pair/share activities in the Biodiversity Unit that could be used in digital format by utilizing interactive whiteboards or shared Google classrooms.
- Materials do provide tools that could be converted digitally, such as true or false, multiple
 choice, open-ended questions, and matching questions. In the Classifying Matter Lesson,
 students discuss how they can classify mixtures. Materials provide images of various materials.
 Students provide a detailed explanation with the evidence. Without guidance from the
 materials, teachers can use this question for students in Google Slides or similar digital products,
 where students can collaborate and see each other's responses.

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 do not integrate digital technology that supports student engagement with SEPs or RTCs. Teachers could copy, of their own volition and, if the materials allow, the questions that show some integration of SEPs into digital tools that are available to the teacher, such as Google

Suite tools, Schoology, Canvas, etc., if they want their students to engage with the materials digitally.

- The Cohesion, Adhesion, and Surface Tension Lesson does include a question in the Extension sidebar stating, "How would you create a cup with a concentration in between two of the existing cups?" A teacher could use this idea of their own accord, make a Google Slide presentation and use it with the whole class, modeling science and engineering practices.
- The teacher, without guidance from the material, could create a discussion forum on which students can engage with the RTCs in relation to Newton's Laws. Teachers would be limited to using presentations, spreadsheets, online forums, and word processing tools as there are no videos, animations or online simulations provided by the materials.

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

- Materials do not provide digital technology that provides opportunities for teachers and/or students to collaborate. Materials do provide collaborative interactions between students with flexible grouping and explorations that could be, without any guidance, manipulated into a digital opportunity.
 - o In the Biodiversity Unit, the pair/share and vocabulary activities could be converted into digital downloadable worksheets.
- Teachers, without instruction or guidance, could provide a digital forum for students to post discussion topics with video responses to one of the questions in the text, such as "Suppose there was no friction between a soccer ball and the ground; how would this affect the game in terms of Newton's laws of motion?" Afterward, students can review one another's responses and give feedback, with teachers also being able to impart their own feedback.

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

- Materials do not provide digital technology that is compatible with a variety of learning management systems. Teachers could copy, of their own volition and, if the materials allow, the content into an LMS that is available to the teacher.
- The table of content could be digitally changed into links that would open each Unit, and vocabulary links could also be added to a digital glossary. Vocabulary cards could be transformed into Google Slides with definitions.
 - A teacher could use the open-ended or the true/false questions found within each lesson, such as Unit Lesson Newton's 3 Laws of Motion, and make a quiz using Google Forms. This form could then be shared through LMSs such as Canvas or Google Classroom.

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	No
	Digital technology and online components are developmentally appropriate for the grade level and align with the scope and approach to science knowledge and skills progression.	
2	Materials provide teacher guidance for the use of embedded technology to support and	No
2	enhance student learning.	
_	Materials are available to parents and caregivers to support student engagement with	No
3	digital technology and online components.	

Not Scored

Digital technology and online components are not developmentally and grade-level appropriate and do not provide support for learning.

Digital technology and online components are not developmentally appropriate for the grade level and do not align with the scope and approach to science knowledge and skills progression. Materials do not provide teacher guidance for the use of embedded technology to support and enhance student learning. Materials are not 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.

- Materials provide information in text format. This information is appropriate for the grade level
 and is consistent with their table of content; however, this textbook does not contain any digital
 components other than the text.
- Materials do not contain a scope and sequence, but they have a Table of Contents in which each lesson aligns with a specific TEKS. For example, the Mass Conservation Lesson is aligned with TEKS 8.6E.
- Materials also use developmentally appropriate questions within each unit lesson that check for understanding of specific science content throughout the Lesson. For example, in the Extension-Beyond question, students are to answer, "What is the Law of Conservation of Mass, and why is it important in chemical reactions?" The Unit Lesson is about mass conservation.

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

Materials do not provide guidance for the use of embedded technology since the materials do
not provide technology. Teachers could use technology for collaboration during writing
assignments. The Classifying Matter Lesson contains the question, "How do we categorize
things?" Teachers can use many forms of technology for the students to answer the question.

- Materials provide limited teacher guidance in sidebars and, in the example, student responses
 to questions. The sidebar in each Unit Lesson contains two questions for students, and the
 material provides an example of a student response. The teacher could make a Google Form
 with the questions from the material that is found within the lesson, then give feedback through
 the features of the Google form. This would provide immediate feedback for students as they
 read through the text.
- Materials do provide teacher-led lesson activities in each unit that could easily be converted into
 a digital format or shared through an LMS. Teachers could also, without guidance from the
 materials, turn the bold print vocabulary words from the text into a digital lesson. For example,
 teachers could input the words and definitions into a Quizlet, and students can then use this to
 review and practice science words. Some bold print words found in the Unit Lesson, Mass
 Conservation, are balanced, unbalanced, chemical change, and physical change.

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

- Materials do not include letters or online components to help parents/caregivers in supporting student engagement with digital technology. Materials do include Unit/Lesson Titles and TEKS for each lesson. The first Unit is the Scientific Method Unit which covers TEKS 8.1 A and B.
- Teachers, without support from the material, could create a digital letter for parents/caregivers and, within the email letter, provide websites, links, and resources with tips for guardians to help support the student. Teachers could also create a video demonstration of an investigation and the engineering processes that go with that experiment for parents/caregivers to do at home with students.