Sugar, Sugar Everywhere

Teacher's Guide

The Rock by Rock Changemaker projects are focused on empowering kids to become changemakers that better our world. Our interdisciplinary projects focus on developing strong word and world knowledge that accelerates reading, writing, listening and speaking skills through science content. Each project can be done whole class, in small groups, or as a self directed learning opportunity.

At Rock by Rock, we believe that children learn best when they are learning relevant content and are deeply engaged in rigorous, hands-on learning that has real-world application. We also believe that habits and character education are a core part of instruction. By infusing habits with academics we can better prepare children to thrive in our ever-changing world while helping to make the world a better place.

The Hybrid Learning Series is ideal for students in 3rd-5th grade..

Classroom Application and Module Structure:

Each module in the Hybrid Learning Series can be done together as a class, in small groups or individually as a self-directed project. Each project centers around one mission that is focused on how we can take small actions to address environmental or social challenges.

Each Project has a real-world mission that empowers students to take action. Each project follows an inquiry arc:

1. **Invest:** Invest students in the Mission / Project.
2. **Reflect**: Reflect on the life habit focus: Student, Creativity, Curiosity, Empathy, Courage, Kinship, Impact Awareness.
3. **Explore**: Understand the problem and real-world needs through reading, video and activities that enable students to connect personally to the issue or problem through reading, writing and art.
4. **Take Action:** Engage in a take action project that involves taking action through writing, art and making (crafts, performance, etc).
5. **Share**: Enlist others to work towards or rally around a cause.
6. **Reflect**: Reflect on what students learned about themselves as leaders and how they grew in their life habits.

At Rock by Rock, we believe in creating flexible tools teachers can adapt based on student needs. Each project is a teacher-designed, interdisciplinary unit that can be flexibly customized. Teachers can follow our recommended lesson flow, or tailor activities to cater to specific student needs.

Use Case	Integrated as part of ELA instructional time.	Specific Science or Social Studies Learning Time	Self Directed Learning
Grouping	**Whole Class , Small Group or Individual**		**Individual**
Purpose	• **Authentic Application:** Reading is a means to learning - I want kids to see real world applications of reading. • **21st century literacies**: I need my kids to be developing reading and writing skills in modern day multimedia formats (i.e. podcast, videos, dramatic play etc…). • **Word and world Knowledge**: My kids need to continue to develop their vocabulary and word and world knowledge to aid in literacy development.	• **Hands-on Learning:** I want students to use multiple modes of learning from literacy to hands-on experiments to the arts. • **Real-world Relevance:** My kids need to see that what they are learning is relevant to their lives today. • **Global Citizenship/ Science Citizenship:** Foster global citizens that are engaged in taking action and developing the life habits that they need.	• **Enrichment**: More advanced students can do projects independently to enhance learning. • **Remediation**: Teachers use projects with small groups to provide high engagement opportunities for learning.
Time Period	Used during a language art or interdisciplinary/ humanities block.	Used to replace Science or Social Studies time and/or a specific project based learning time during the week.	Used as a learning center during traditional guided reading or small group rotations. Some kids engage independently while teachers pull groups to support as needed.
Structure	Whole Group Reading Lessons - Pre/During/Post Reading Close Reading or Read A-loud	Science and Social Studies Lessons	Guided Reading or Centers Time Independent Learning.

Materials and Technology:

Materials:

- **Student Mission Log:** You have the choice between a print Mission Log where students can write and take notes by hand or a digital Mission Log you can share with students in a variety of ways. Mission Logs have editable text to enable teacher customization.
- **Project Materials:** In the first lesson of the online module we outline all of the materials that students will need for the project and activities. Most materials are things that can be found in a classroom and/or purchased easily online and/or teacher stores (i.e. discount school supplies, dollar store etc…).

Materials List:	
- Clear cups or glasses - Masking tape - Pen - 1-teaspoon measuring spoon - Sugar - Salt - Cornstarch - Flour - Baking soda - Baking powder - Vinegar - Vegetable oil - ½ cup measuring cup - Warm water	- Digital scale - Balloons - Clear plastic bottles - Funnel - Instant yeast packets - Timer - Nutrition labels with ingredient lists - Poster board or cardboard - Scissors - Coloring tools - Water - Eggshell - Spoon

Technology: All technology requirements include technology found in most classrooms.

- If doing this as a self directed project, we recommend every student have access to a laptop/computer, wifi, Chrome browser and headphones.
- For teachers who are interested in whole group instruction, we recommend additional technology such as a projector or smartboard and speakers.

Standards Alignment:

Each project is aligned to national and state standards for reading, writing, science, social studies and the arts. Each module was designed to help students progress towards standards holistically. There is not a 1-1 correspondence between each standard and each lesson. Research shows that reading and writing standards develop holistically and more effectively when approached as a whole rather than teaching standards and skills in isolation. Our modules build NGSS aligned science content and practices, CCSS aligned reading, writing, listening and speaking skills, and 21st Century SEL competencies. While many lessons address all clusters of standards, one standard cluster often leads over others.

This modules specifically supports:

Subject	Standards
Reading CCSS	**Reading Informational Text**: • Key Ideas and Details: 1-3

	• Craft and Structure: 4,6 • Integration of Knowledge and Ideas: 7, 9 • Text Complexity: 10
Writing CCSS	Text Types and Purposes: 1-3 Product and Distribution: 4-6 Research to Build and Present Knowledge: 7-9 Range of Writing: 10
Listening and Speaking CCSS	Comprehension and Collaboration: 1-3 Presentation of Knowledge and Ideas: 4-5

Science NGSS	**Performance Expectations (PEs):**
	• **5-PS1-1.** Develop a model to describe that matter is made of particles too small to be seen.
	• **5-PS1-2.** Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
	• **5-PS1-3.** Make observations and measurements to identify materials based on their properties.
	• **5-PS1-4.** Conduct an investigation to determine whether the mixing of two or more substances results in new substances.
	• **5-PS3-1.** Use models to describe that energy in animals' food (used for body repair, growth, and motion and to maintain body warmth) was once energy from the sun.
	
	Disciplinary Core Ideas (DCIs):
	• **PS1.A: Structure and Properties of Matter**
	  ○ Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gasses are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.
	  ○ The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish.
	  ○ Measurements of a variety of properties can be used to identify materials. (Boundary: At this grade level, mass and weight are not distinguished, and no attempt is made to define the unseen particles or explain the atomic-scale mechanism of evaporation and condensation.)
	• **PS1.B: Chemical Reactions**
	  ○ No matter what reaction or change in properties occurs, the total weight of the substances does not change. (Boundary: Mass and weight are not distinguished at this grade level.)
	  ○ When two or more different substances are mixed, a new substance with different properties may be formed.
	• **PS3.D: Energy in Chemical Processes and Everyday Life**
	  ○ The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).
	• **LS1.C: Organization for Matter and Energy Flow in Organisms**
	  ○ Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion. (secondary)
	
	Science and Engineering Practices (SEPs):
	• **SEP.1 Asking Questions and Designing Solutions**

	○ Identify scientific (testable) and non-scientific (non testable) questions. • **SEP 2 Developing and Using Models** ○ Develop and/or use models to describe and/or predict phenomena. • **SEP.3 Planning and Carrying Out Investigations** ○ Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. • **SEP.4: Analyzing and Interpreting Data** ○ Represent data in tables and/or various graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships. ○ Analyze and interpret data to make sense of phenomena, using logical reasoning, mathematics, and/or computation. • **SEP.5 Using Mathematics and Computational Thinking** ○ Describe, measure, estimate, and/or graph quantities (e.g., area, volume, weight, time) to address scientific and engineering questions and problems. • **SEP.7 Engaging in Argument from Evidence** ○ Construct and/or support an argument with evidence, data, and/or a model. • **SEP.8: Obtaining, Evaluating, and Communicating Information** ○ Read and comprehend grade appropriate complex texts and/or other reliable media to summarize and obtain scientific and technical ideas and describe how they are supported by evidence. • **Nature of Science: Scientific Knowledge is Open to Revision in Light of New Evidence** ○ Science explanations can change based on new evidence. **Cross-Cutting Concepts (CCCs):** • **CC.2: Cause and Effect** ○ Cause and effect relationships are routinely identified, tested, and used to explain change. • **CC.5: Matter and Energy** ○ Matter is made of particles. ○ Matter flows and cycles can be tracked in terms of the weight of the substances before and after a process occurs. The total weight of the substances does not change. This is what is meant by conservation of matter. Matter is transported into, out of, and within systems.
SEL 21st Century Skills/Arts	**Life Habit:** Curiosity **CASEL** **Responsible Decision-Making** • Demonstrating curiosity and open-mindedness • Learning how to make a reasoned judgment after analyzing information, data and facts **Self-Awareness** • Developing interests and a sense of purpose

This Project's Focus: Sugar Sugar Everywhere

Real-World Mission	Real-World Project	Character Focus
How can we educate people about the impact of sugar on our lives?	**Write a picture book to inform people about the positive and negative impacts of sugar on our foods and our health.**	**Curiosity: How can we use curiosity to determine whether sugar is a food hero or a food villain?**

Types of Lessons within a module:

Type	Description	Student Output.
Informational Text Based Lessons	Lessons that develop informational text skills (reading, graphic organizers, charts, graphs, science concepts, social studies concepts). All lessons follow a similar flow: • **Pre-reading:** Intro/hook • **During Reading:** Interactive Questions • **Post Reading:** Application activity - many times the post activity can lead to a discussion or supplemental activity aligned with particular class or student needs.	• Student mission log • Group discussion.
Hands-on Activities	• Experiential learning opportunities that are hands-on and require kids to go offline to learn by doing and making. • Focused on leveraging different learning modalities to engage kids and increase motivation, support internalization of content and aid retention.	• Student mission log • Activity products.
Habit Focus and Reflections	• Integrated life-habit lessons that develop a 21st century skill/habit. • Each project starts and ends with a habit reflection to show growth.	• Activity products. • Student reflections
Take Action Project	• Short texts/videos/lessons that develop foundational project content (i.e. what is podcast?) and project skills (i.e. how do I create effective podcasts). • Short and quick application of the lesson as a guided practice before applying it to the project to ensure kids have internalized the concepts. • Creation of a take action project that leads to genuine impact. Projects use a modern day multimedia form of communication. • An opportunity to share with an authentic audience where kids present what they have learned.	• Student mission log • Take action project • Share/ presentation

	Objectives:
	• Explain that properties of matter can be observed and measured.
	• Describe the properties of common kitchen ingredients.
	• Use descriptions of properties to identify mystery ingredients..
	
	Methods:
	• **Pre-Reading:** Students read the chat to preview that sugar is one of many common kitchen ingredients, and these ingredients can be distinguished by their unique properties.
	• **Read:** Students read the Zine page and discuss the main ideas on each page. In this section, there are multiple main ideas, including:
	  ○ Matter has properties that can be observed and measured.
	  ○ Different types of matter have different properties.
	• **Post-Reading (Investigation):** Students conduct an investigation to observe the properties of various kitchen ingredients, including color, texture, and state at room temperature. Then, students mix each ingredient with water to observe which ingredients dissolve in water and which do not.
	• **Identifying Mystery Ingredients:** Students use the drag and drop interactive feature to identify mystery kitchen ingredients. Students read about the properties of each mystery ingredient, and then they use the information they gathered in their investigation to identify mystery ingredients.
		• Mission Log
		• Clear cups
		• Masking tape
		• Pen
		• 1-tablespoon measuring spoon
		• Sugar
		• Salt
		• Cornstarch
		• Flour
		• Baking soda
		• Baking powder
		• Vinegar
		• Vegetable oil
		• 1-cup measuring cup
		• Warm water
		• Digital scale
			observations and measurements to identify materials based on their properties.
			
			5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.
			
			PS1.A: Measurements of a variety of properties can be used to identify materials.
			
			CCSS.ELA-LITERACY.RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

3-3	**What Happens When Sugar Dissolves?** **Objectives:** • Develop a model to show that matter is made of particles that are too small to be seen. • Explain how particles of matter can be used to describe observable properties of solids, liquids, and gasses. • Use a model to explain that the weight of sugar and water remains the same when sugar is dissolved in water, even though the sugar appears to vanish. **Methods**: • **Did You Know:** Students read the “Did You Know” fact to preview the idea that large amounts of sugar are dissolved in soda.	• Project Module • Mission Log	5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen. PS1.A: Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gasses are made from matter particles that are too small to see and

Unit Overview: *(Whole Class or Small Group)*

Sugar is found in almost all of the foods we eat. Sugar is found naturally in some foods, but it is also added to many foods. Most people know that sugar can make foods taste sweet, but there are many other ways that added sugar can improve the look and taste of food. The human body gets energy from sugar, but too much sugar can cause a range of health problems, including tooth decay, weight gain, and an increased risk of heart disease and type 2 diabetes.

In this module, students learn about the properties of substances through the lens of sugar. Students explore the properties of sugar to find out why sugar is found in so many unexpected foods. Then, they learn about the ways in which sugar can be helpful and harmful to the human body. Students use the information they gather to decide whether sugar is a food hero or a food villain. Finally, students take action by creating a picture book to inform their loved ones about the impact of sugar on our lives or compel them to take action!

*__Background Information About Sugar:__ When we think of the word *sugar*, we typically think of the white, crystalline substance often referred to as *table sugar*. Table sugar, also known by its scientific name of *sucrose*, is actually just one of many different types of sugar. In science, *sugar* is a general term used to describe a group of sweet, water soluble substances. Various forms of sugar molecules are present in plants (ex: glucose, fructose, and sucrose) and in the milk of mammals (ex: lactose). When these simple sugar molecules are joined together in long chains, they form larger, more complex starch and fiber molecules. Sugar, starch, and fiber are collectively referred to as carbohydrates.

In this project, students will learn how plants form sugars and how these natural sugars are processed to make the product we know as table sugar. Students will learn that the human body uses sugars to make energy, and that the body can break starches down into sugars. Students will learn the difference between natural and added sugars on food labels, but students will not distinguish between different types of simple sugar molecules.

*__Food Safety Alert:__ Students will complete investigations using common kitchen ingredients. Students should use these materials only as directed, and they should not eat or drink any of the investigation materials.

*__Nutrition Alert:__ Students gather information about dietary choices. The recommendations for daily sugar intake presented in this module come from the Dietary Guidelines for Americans, published by the United States Department of Agriculture (USDA) and the Department of Health and Human Services (HHS). These recommendations are consistent with World Health Organization (WHO) guidelines. However, students should also consult with key adults in their lives, such as guardians or doctors, to ensure their dietary choices account for individual health factors such as food allergies, diabetes, etc.

Virtual Field Trips

Alina Morse

In this project, students meet Candy Entrepreneur, Alina Morse. Alina got the idea for Zolli Candy - a zero sugar candy, when she was just 7 years old. Alina shares her experience as a CEO of Zolli Candy, why she thinks zero sugar candy can make a difference to our health and gives advice on how every youth can make change in this world.

Caron Levis

In their Take Action Project, students meet author and children's book writer Caron Levis. Caron will teach students about what it means to be an author, how to think about writing a powerful story by showing not telling and picking the right words and illustrations to describe their story.

Sample Unit Goal: Sugar Sugar Everywhere

1. Demonstrate curiosity by asking questions and seeking answers about the impact of sugar on our food and our health.
2. Observe and describe the physical and chemical properties of sugar.
3. Explain that all matter includes properties such as: color, texture, state (solid, liquid, or gas), and ability to dissolve.
4. Analyze food labels to compare the amounts of natural and added sugars in various foods.
5. Investigate the effects of sugar on our health and teeth.
6. Create a picture book to educate others about the impacts of sugar on our food and our health or compel them to take action. .

Key Vocabulary

Chemical Change	Dissolve	Matter	Photosynthesis	Physical Change	Property
n. A process in which one or more substances are transformed into different substances	v. To break apart into particles too small to be seen and mix completely with another substance.	n. Anything that takes up space and can be weighed.	n. The process in which plants use energy from the sun to convert air and water into a form of food called sugar.	n. A process that changes the properties of a substance without changing the type of substance	n. A characteristic or trait that can be used to describe matter.

Pro Tip

Before you begin your planning, we suggest you read this teacher's guide, the student Mission Log and that you skim the online course to become familiar with the content. If you want to build your own background knowledge on the impact of sugar on foods and the human body, you can complete the online module as a student.

At-A-Glance

Module	Description	Activities
1: Your Mission **1-2 Days**	Students are introduced to their "Sugar Sugar Everywhere" mission. Students analyze sugar consumption data, and begin to consider some of the positive and negative impacts of sugar on our lives. Students then draw on this information as they record their initial ideas about whether sugar is a food hero or a food villain.	**Online:** • Mission Introduction. • Students graph and analyze data to describe trends in sugar consumption. • Students gather information about the impact of sugar on our lives. • Students complete a card sort to compare perspectives on sugar.

2:Why is Curiosity Important? **1-2 Days**	Students complete a guessing game to compare the amounts of sugar in various foods, and then students generate questions about the activity. Students realize that generating questions about sugar is one way to practice the life habit of curiosity. Students read about people whose curiosity led to interesting discoveries about sugar, and they also learn about the health benefits of curiosity. Finally, students learn about different ways to demonstrate curiosity, and they create their own 7-day curiosity challenge as a way to flex their curiosity muscles.	**Online:** • Students guess the amount of sugar in various foods • Students define curiosity and identify their curiosity profile. • Students generate meaningful questions about sugar. • Students create a 7-day curiosity challenge to build their curiosity muscles.
3A: What is Sugar and How is it Made? **2-4 Days**	In Module 3A, students learn about the properties of sugar and where sugar comes from. Students begin by learning that all matter, including sugar, can be described by its properties. Properties of matter can include color, texture, state (solid, liquid, or gas), and ability to dissolve. Students conduct an investigation to observe the properties of sugar, and then they compare the properties of sugar to the properties of other common kitchen ingredients. Students use their observations to identify mystery ingredients. During the investigation, students make measurements before and after each kitchen ingredient is mixed with water. Based on these measurements, students conclude that the weight of the ingredient and water remains the same–even if the ingredient dissolves, or is no longer visible, after it is mixed with water. Students read a text to learn that all matter is made of particles that are too small to be seen. They learn that when matter dissolves, visible pieces of matter break apart into pieces that are too small to be seen. This explains the weight measurements students gathered during their investigation: the weight remained the same before and after ingredients dissolved because the ingredient is still in the cup. It is just too small to be seen! These tiny particles of matter can also explain the properties of solids, liquids, and gasses. At the end of this module, students learn that sugar is formed by plants in the process of photosynthesis, and sugars can be removed from the plants to make products such as table sugar.	**Online:** • Students use properties of matter to identify mystery substances. • Students read a text to learn what happens when sugar dissolves. • Students explore an interactive slide show to learn how plants form sugar • Students explore an interactive timeline to learn about the history of sugar • Students read a text and complete a sequencing activity to learn how sugar is processed. **Hands-on:** • **Comparing Kitchen Ingredients Investigation:** Students observe and describe the properties of various kitchen ingredients. Students then observe how each ingredient interacts with water.
3B: Why is Sugar Everywhere? **2-4 Days**	In Module 3B, students learn why sugar is in so many foods. Students begin by exploring an interactive timeline to learn how sugar was introduced to various parts of the world. Students learn that sugar used to be so expensive that it was only	**Online:** • Students explore an interactive slide show to learn how sugars help breads rise. • Students read a text to learn about additional properties of

	available to the rich. Students then learn how sugar is used today. Students learn that sugar is added to many unexpected foods and drinks because of the many ways it can improve the look and taste of food. Through text students learn that sugar is not only added to food to make it taste sweeter. Sugar is also added because it can improve the look and texture of foods, and it can even help preserve foods. Students then explore nutrition labels to find out how much added sugar is in different foods and drinks.	sugar that improve the look and taste of food. • Students explore an interactive food label to learn how the human body uses sugar and other nutrients. • **Hands-on:** • **Yeast Balloon Investigation:** Students conduct an investigation to determine that a new substance is formed when yeast interacts with sugar. • **Food Label Poster:** Students collect food labels and create an informational poster with graphs comparing the natural and added sugars.
3C: How Does Sugar Affect Our Health? **2-4 Days**	In Module 3C, students learn how the body uses sugar, and the negative health effects of consuming too much added sugar. Students begin by learning that the body uses sugar for energy, Students learn about the daily recommended maximum amount of added sugar, and analyze data to see how easy it is to consume too much sugar. Finally, students read a text to learn about the negative health impacts of too much sugar, including weight gain and diabetes.	**Online:** • Students guess the amounts of added sugar in various foods and meals to understand how easy it is to consume too much sugar. • Students analyze data to learn how average daily sugar consumption compares to the recommended daily intake. • Students learn how sugar impacts our teeth and hear from CEO Alina Morse who has created Zolli candy, a zero sugar candy to help prevent tooth decay. • Students learn how Alina used the science of sugar to find a sugar replacement and how you can become an entrepreneur to help better our world. • Students read a text to learn about the negative health impacts of consuming too much added sugar. **Hands-on:** • **Tooth Decay Investigation:** Students conduct an investigation to observe the effects of sugar on teeth.
3D: Is Sugar a Food Hero or a Food Villain? **2-3 Days**	In Module 3D, students synthesize what they have learned to decide if sugar is a food hero or a food villain. They begin by examining the ways that sugary drinks are marketed to children and teens, and then they engage in a debate about whether sugary drinks should be taxed. Students then read about the people and groups working to raise awareness about the health risks of sugar, create rules or laws to make healthy eating easier, and develop foods with less added sugar. Students then put together everything they have learned in order to choose the focus of their Take Action Project.	**Online:** - Students explore information about how sugary drinks are marketed to children and teens. - Students complete a card sort to analyze different perspectives on sugary drink taxes. - **Debate:** Students prepare a case and engage in a debate. - Students read a text to learn about the people and groups working to raise awareness about the health risks of sugar, create rules or laws to make healthy eating easier, and develop foods with less added sugar.

4A+4B: Take Action Project: Create a Picture Book **3-6 Days**	Students will create a picture book to teach others about the impact of sugar on foods and the human body. They will use tools from a professional author to create their picture books. **Virtual Field Trip:** Students will meet author Caron Levis. Caron will teach students three strategies for developing an engaging story: creating a plot mountain, showing the reader instead of telling the reader, and choosing powerful words.	**Online:** • **Virtual Field Trip:** Students meet Caron Levis and learn key strategies to create an engaging picture book. **Hands-on:** • **Create a Picture Book:** Students write and illustrate a picture book.
4C: Share & Reflect **1 Day**	Students present their picture books to an authentic audience to teach the audience about the impacts of sugar on food and the human body or compel them to take action. Finally, students will reflect on what they have learned about curiosity and how they can extend those skills to other areas of school and life.	**Hands-on:** • **Share**: Students share their picture book with an audience. • **Reflect:** Students engage in personal reflection (1-1, small group, whole group) to reflect on ways to use curiosity beyond the scope of the project.

Lesson Flow

This project could be done in as little as 2-3 weeks with several full days devoted to project-based learning or as many as 5 weeks depending on how much time each day teachers allot to the project and how much depth they choose to explore with each activity. The below lesson sequence is designed to be a flexible jumping-off point for teacher planning and should be modified based on student need and teacher discretion.

Lesson	Objective and Description	Materials Needed	Standards Alignment
Invest			
Module 1: Introduction to "Sugar Sugar Everywhere" (1-2 Days)			
1-1	**Your Mission** **Objectives:** • Build investment and curiosity in the mission. • Explain that the mission is to raise awareness about the impact that sugar has on our foods and our health. **Methods**: • **Intro Video:** Students watch the intro to the project and mission video to build investment about the problem. • **Picture Book Video:**: Students watch a short intro video to introduce	• Project Module • Mission Log	Preparation for: 5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, and motion and to maintain body warmth) was once energy from the sun.

End of Preview

If you want to see the rest of the teacher's guide, sign-up for a free-trial.

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