

Recall Teacher Instructions

Review: What Do Living Things Need?

Objective: Each student will be able to identify the basic needs of organisms.

- Students achieve the following 'I can' statement, "I can identify the basic needs of living organisms."
- Students recall prior knowledge of the basic needs of all organisms in their environment.
- Academic Terms: shelter, air, soil, food, water, sunlight, producer, consumer, organism, living component, non-living component, ecosystem.

What Is Happening?

Digital Student Journal Slides 3-4

Description: Students observe phenomena, or observable events, and record their observations. This phenomenon-based approach serves as a hook to retrieve prior knowledge relative to any 3rd and/or 4th grade supporting content TEKS standards. Students will use the same image as they move through a sequence of interrelated tasks, beginning with their basic observations. This attention-getter can be used either as an independent or cooperative learning strategy to activate prior knowledge. Be sure to define that phenomena (or this phenomenon) is an observable event.

Answer Key

There is no correct or uniform answer for this slide. However, students should be able to relate information from 3rd, 4th, and possibly 5th grade to these terms using examples they have either directly observed or learned about previously.

Be sure to provide time for students to make observations about the image before moving on to the description on Slide 4. Encourage full sentences in the written descriptions. Examples include what appears to be a microscopic image through a lens, magnified particles that are blue and red, and unevenly distributed 'gunk' on a slide.

ELPS Spotlight

STRATEGY: Visual Scaffolding

Body Talk: Students will use visual images to identify and describe the basic needs of living things and use gestures that demonstrate how plants fulfill their basic needs.

Instructions:

1. Show the students the five index cards with images related to each basic need (e.g. a tree for "air," a flower for "sunlight," etc.) and ask them to suggest what each image represents in terms of the basic needs of living things. Write their responses on the board. **(Reading)**

2. Hold up each card and ask the students to create a gesture that represents the basic need on the card. For example, they could pretend to take a deep breath for "air" or make a drinking motion for "water."**(Listening and Speaking)**
3. Ask the students to repeat the gesture and say the word associated with the basic need. Repeat this for each of the five cards.
4. Next, ask the students to act out a scenario where a plant is fulfilling its basic needs (e.g. reaching for the sun for "sunlight," soaking up water through its roots for "water," etc.).
5. Have each group present their scenario to the class, using the gestures and words they learned to explain the plant's needs.
6. Have the students work in small groups to create their own sentences that show a plant fulfilling its basic needs. **(Writing)**

ELPS Tips for Beginning EB Students:

- Simplify Language: Use simple language and avoid complex sentence structures when communicating with Beginning EBs. This can help them understand instructions and concepts more easily.
- Provide Sentence Frames: Provide sentence frames for students to complete when discussing their scenarios (for example, "The plant needs _____ to grow.").
- Use Realia: Use real-life examples such as a small plant or seed to demonstrate the basic needs of living things.

ELPS Tips for Intermediate and Advanced EB Students:

- Provide sentence frames for students to use when creating their scenarios (e.g. "The plant needs ___ in order to ___"). Encourage students to use more complex vocabulary and sentence structures when describing the basic needs and plant scenarios.
- Provide opportunities for students to debate and defend their ideas about the importance of each basic need for plants, and how plants can survive in extreme environments.

What Do Living Things Need?

Digital Student Journal Slide 5

Description: Students complete a brief reading and are introduced to relevant terms organism, producers, consumers, abiotic, biotic, and interdependent.

Vocabulary Check

Digital Student Journal Slide 6

Description: Students match terms with their definitions, including shelter, food, sunlight, air, soil, and water. Academic terms are dragged and dropped graphically in relation to each other and definitions. Application of understanding these terms is scaffolded in the next slide as students complete a concept map.

Answer Key

1. Food
2. Sunlight
3. Air
4. Shelter
5. Soil
6. Water

Apply Academic Terms

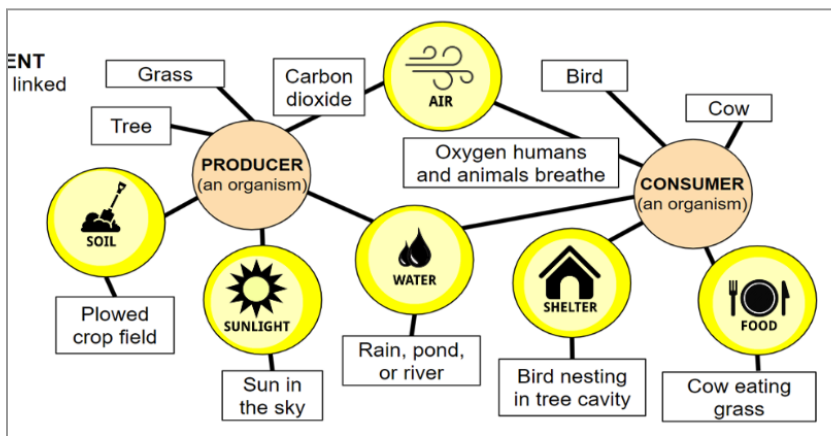
Digital Student Journal Slide 7

Description: Students apply their understanding of the terms to concrete examples. They identify the examples of basic needs of producers and consumers in a farm environment by completing interactive matching in a bubble map.

Previous to 5th grade, students described physical characteristics of environments, such as sunlight, water and soil, and how these basic needs support producers (i.e plants) and consumers (ie. animals). When needed, revisit this with students as they bridge “living” and “biotic” as well as “nonliving” and “abiotic” terms in 5th grade. Students will further practice and apply these terms starting in Practice A of this TREK.

Answer Key

Pictured below.



Connect to You!

Digital Student Journal Slide 8

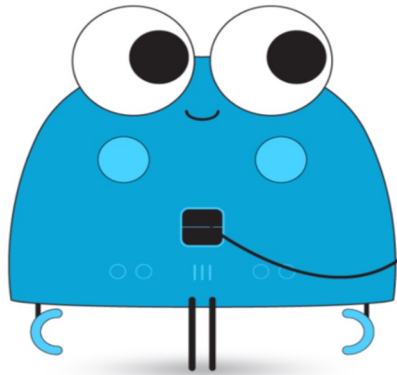
Description: Students write a brief reflection on what they knew about the academic terms up to the present.

This literacy strategy promotes a connection of science to our daily lives. It is another metacognitive vocabulary strategy that elicits connections between the terms and students' experiences. All of our

experiences are different, but can usually be summarized by a quick connection to one or more of the academic terms.

Answer Key

There is no correct or uniform answer for these connections. However, students should be able to relate information from 3rd, 4th, and possibly 5th grade to these terms using examples they have either directly observed or learned about previously. Encourage full sentences in the written descriptions.



TREKs™

5.12A Interdependence

Recall

Slide 1

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TREK Goals

5.12A: Interdependence

Observe and describe how a variety of organisms survive by interacting with biotic and abiotic factors in a healthy ecosystem.

Recall

Review:
What Do Living Things Need?

I can identify the basic needs of living organisms.



Slide 2

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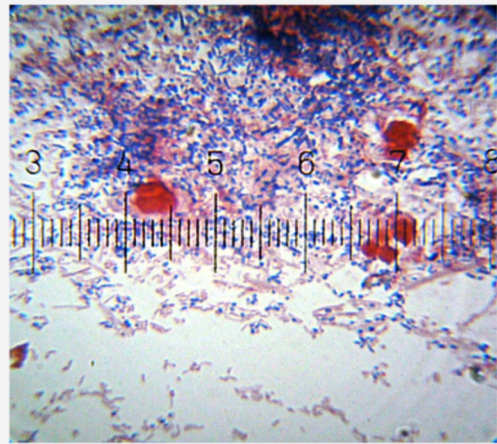


Image Credit: Wikimedia Commons / Bob Blaylock

What Is Happening?

Instructions: Describe what you think is happening in this picture. What do you see? What does it make you think of? What does this make you wonder?

I can think of a microscope.

Submit

Slide 3

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◀ 3 / 10 ▶

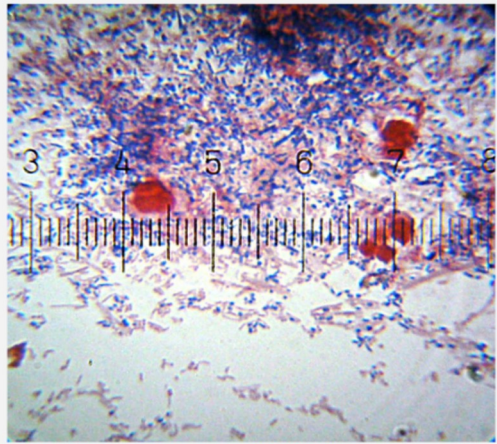


Image Credit: Wikimedia Commons / Bob Blaylock

What Is Happening?

Gunk on your teeth!

This is a microscopic image of *dental plaque*, or the yellow film that builds up on your teeth. It is made up of tiny bacteria that rely on you, another living thing.

For these bacteria, you are a prime place to live! You provide water, food, and shelter to survive and reproduce.

However, these bacteria can damage your teeth. Brushing and flossing keeps bacteria populations low. This is why brushing your teeth and tongue twice a day helps reduce damage over your lifetime.

Slide 4

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RECALL

What Do Living Things Need?



Image Credit: Unsplash / Marty Southwell

We all have needs. Every living thing (organism) has some basic needs to be met in order for them to live, grow, repair, and reproduce.

Plants are **producers**, which means they need sunlight, water, and minerals from the soil to make their own food. Animals are **consumers**, meaning they need to eat other plants and animals to survive. Other things, like shelter from predators, help keep them alive longer.

In healthy ecosystems, living (*biotic*) and nonliving (*abiotic*) things, or factors, are generally **interdependent**, or linked to each other. These factors help a variety of organisms survive by helping them meet their basic needs.

Slide 5

RECALL

Vocabulary Check



Instructions: Move each **BASIC NEED COMPONENT** circle to where it matches its definition.



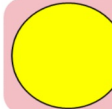
1. The material that people and animals eat that give them energy to grow, repair, and do things.



4. Something that covers or protects.



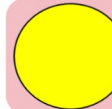
2. The light of the sun; sunshine.



5. A mixture of natural materials that covers much of Earth's surface. Materials include dead plants, dead animals, bacteria, rocks, sand, etc.



3. The mixture of gases you can't see or smell that surrounds Earth.



6. A liquid that comes from the clouds as rain and forms streams, lakes, etc.

Submit

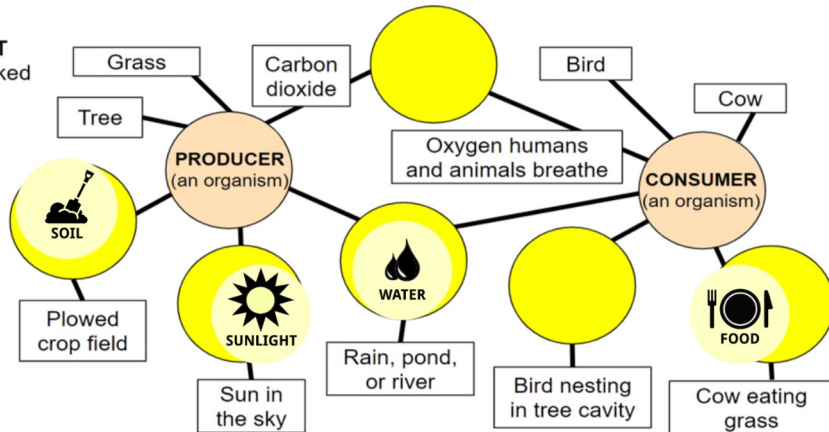
Slide 6

RECALL

Apply Academic Terms



Instructions: Move each **BASIC NEED COMPONENT** circle that matches to the linked example in each square.



Submit

Slide 7

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RECALL

Connect to You!



Instructions:

1. Read the vocabulary terms in the Term Bank.
2. Select TWO terms that you know from the Term Bank
3. Write one term in the box labeled A and the other term in the box labeled B.
4. Under each term, write a sentence explaining what you know about the word or words you've selected.

TERM BANK

air	organism
consumer	producer
ecosystem	shelter
food	soil
living thing	sunlight
nonliving thing	water

A

Write here

Submit

B

Write here

Submit

Slide 8

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