

Lizard Lunch

a lesson about lizard food chains



This lesson is inspired by our class pet, Darwin, the bearded dragon.

Lesson Summary

Students dissect “lizard guts”! They will learn about the diets of bearded dragons and three other lizards and determine their role in the ecosystem based on what they eat.

***The “guts” are made of slime and plastic plants/insects/animals cut into pieces.*

Learning Standards

5th Grade Science Standards for Ohio

5.LS.1: Organisms perform a variety of roles in an ecosystem. Populations of organisms can be categorized by how they acquire energy. Food webs can be used to identify the relationships among producers, consumers and decomposers in an ecosystem.

5.LS.2: All of the processes that take place within organisms require energy. For ecosystems, the major source of energy is sunlight. Energy entering ecosystems as sunlight is transferred and transformed by producers into energy that organisms use through the process of photosynthesis. That energy is used or stored by the producer and can be passed from organism to organism as illustrated in food webs.

Materials

- Computers & internet access
- Tweezers
- Slime (homemade or store bought)
- Plastic plants, insects and animals OR laminated pictures of insects and animals
- Fold-top baggies
- Rubber bands

Lesson Objective

Students will learn about the energy roles of organisms and their connections within food chains. The goal is for students to deepen their understanding of the difference between consumers and producers and how they obtain energy by dissecting "lizard guts" in the activity. Students will analyze the contents of a lizard's stomach and identify organisms as either producers or consumers. They will also determine the energy role the lizard has in the ecosystem (herbivore, omnivore, carnivore).

Prior Knowledge

Students will complete this lesson after learning about energy flow in an ecosystem.

Vocabulary:

- Producer
- Consumer
- Herbivore
- Omnivore
- Carnivore
- Food Chain
- Food Web

Lesson

1. Students research the diets of 4 lizards in the wild: bearded dragon, chameleon, tegu, and iguana. (We will discuss the difference between the bearded dragon's diet in captivity vs. the wild.) They may work in groups or individually to complete the research using a Google search or websites provided by the teacher.
2. Students will fill in the charts with the specific types of plants and organisms that each lizard eats. *Students must list at least 5 different foods for each lizard. (This is the Google Slides presentation students will be able to type in and complete https://docs.google.com/presentation/d/1Lknax6LRoMOobyZuuQXE9iCabfT_XSKpK0c6QaWWw3w/edit?usp=sharing)
3. Discuss the results as a whole class and share what they learned about the lizards and their diets.
4. Students will work in small groups to do the dissection. Each group will be given the "guts" of a lizard. They will dissect the lizard's lunch and sort the pieces of organisms they find in the lizard's stomach and then identify the plant/insect/animal by its pieces. Students will refer to their research, so they can identify what lizard their guts were from.
5. Students work in their groups to complete a digital reflection on the Google Slides file in Google Classroom. They will answer the following questions:
 - a. Is your lizard a producer or consumer? How do you know?
 - b. What organisms did you find in your guts?
 - c. Is your lizard a herbivore, omnivore, or carnivore? Describe evidence to support your answer.
 - d. What lizard are your guts from? How do you know?

6. On another slide in the file, students will create a food chain to show how their lizard got energy. They will find images to make a food chain on one of the slides and put organisms that the lizard ate.
7. Share results with the class! Each group will share what lizard lunch they dissected. We will also discuss which lizards were herbivores, omnivores, and carnivores. We will also share their food chains on the SMART board and display them so everyone can see.

*I will assess the students' answers on their digital worksheet.

Lizard Lunch Prep

- Slime can be store bought or homemade.
 - I purchase plastic plants, insects and animals from the Dollar Tree and Amazon. (*If I cannot find a certain insect or animal, I print pictures and laminate them.)
 - Sort the animals into groups for each lizard.
 - Cut the food into small pieces.
 - Mix the pieces into the slime.
 - Put into the plastic baggie and use the rubber band to seal the bag.
- *I have students use scissors to cut the stomach of the lizard open. I provide tweezers, so students can use them to really feel like they're dissecting the guts. It also helps to get the small pieces from the slime.

Lizard Lunches

Bearded Dragon: ants, beetles, insects, fruit, leaves, small lizards(omnivore)
Green Iguanas: flowers, leaves, fruit (herbivore)
Chameleons: grasshoppers, praying mantis, crickets, small lizards (carnivore)
Tegus: insects, spiders, snails, fruits, seeds, reptile and bird eggs (omnivore)