

Science in a Bag - Teacher Page
Diet Diner

Grade Level

4th

Standards

- GLE 0407.3.2 Investigate different ways that organisms meet their energy needs.
- SPI 0407.3.1 Determine how different organisms function within an environment in terms of their location on an energy pyramid.
- ✓0407.3.2 Classify organisms as carnivores, herbivores, or omnivores.

Task Objective

The learner will be able to classify different types of animals as either a carnivore, herbivore, or omnivore, and to distinguish what different animals eat to meet their energy needs.

Explanation

All the animals can be categorized as either a carnivore, herbivore, or omnivore. A carnivore is a predator because it eats meat and has to find and catch its prey. Carnivores can be animals on land such as lions and hyenas, animals in the sky such as eagles, and animals that are insects such as the dragonfly. Animals that only eat plant material are herbivores. This means leaves, flowers, fruits, or even wood. Omnivores are animals that eat both plants and meat. For example, chickens are omnivores because they eat seeds, but they can also eat worms.

In this activity the students will act like a hostess or host of a restaurant and set the animals in the different restaurants depending on whether the animal is a carnivore, herbivore, or omnivore. For example, if the animal is a(n) herbivore, the student will set the animal in the herbivore diner. Then the student will let the waiter know what the customer would like to eat by matching the thought bubble with the correct animal. Finally, the student will check the reservation list for the night, which will let them check their work.

Common Misconceptions

- If an animal has big teeth they must be a carnivore.
- Carnivores have more energy than herbivores.
- Herbivores eat plants only.
- There are more herbivores than carnivores because people keep and breed herbivores.
- Carnivores are big or ferocious, or both.
- Herbivores are small and passive.

Real World Connection

The science behind this activity is used in the job of a zookeeper and veterinarian. Zookeepers care for animals, and knowing if an animal is a(n) herbivore, carnivore, or omnivore can tell them what kind of food an animal eats. Also, an animal has a different shape or kind of teeth depending on what category it fits into, which a veterinarian can use when caring for an animal medically. Finally, the science behind this activity can teach the students about themselves because they will learn what category humans fit into and how we meet our energy needs.

Connections Across the Curriculum

- Standard 5-Data, Probability and Statistics
GLE 0406.5.1 Collect, record, arrange, present, and interpret data using tables and various



representations.

This standard can be satisfied by having the students complete the table in their learning logs.

- Economics Content Standard: 2.0
4.2.03 Understand fundamental economic concepts.
a. Explain and demonstrate the role of money in daily life.

This standard can be satisfied by including the prices of the foods in the thought bubbles and play money in the bag, and having the students count out the correct amount of money to pay the waiter. This way students would understand that in order to have food to eat, they have to use money to buy it

- Standard 3-Writing
✓0401.3.2 Write for a variety of purposes: to persuade.
This standard can be satisfied by having the students make an advertising flier to persuade customers to come to their diner.

References

Information for Misconceptions

- <http://beyondpenguins.ehe.osu.edu/issue/tundra-life-in-the-polar-extremes/common-misconceptions-about-biomes-and-ecosystems>

Activity

- <http://www.filefolderfun.com/Pages/SecondGradeScience/DietDiner.html>

Information for Explanation

- <http://saburchill.com/chapters/chap0006.html>

