

Lesson: Physical and Behavioral Adaptions

Objective: At the conclusion of this lesson, students will be able to state the difference between a physical and behavioral adaptation and give an example of each type

NGSS: 4-LS1-1, 5-LS2-1

Materials: Beaver kit containing: balloon(lung), raincoat(outer layer), felt(inner layer), goggles (nictitating membrane), dustpan(tail), oil can(castor gland), hairclips(shut-off valves For ears, nostrils, mouth), chisel on a string(teeth), gloves with fingernails attached (front feet), flipper(hind feet), card ring explaining adaptations,

Procedure

1. Introduce the lesson.
 - a. Why we need to know about the beaver, and its importance.
 - b. The definition of an adaptation
 - c. The difference between a physical and behavioral adaptation
Physical, they are born with and behavioral are learned. Give an example relating to them, such as blinking (physical) and talking (behavioral}.
 - d. Why adaptations to an environment are necessary
2. The activity
 - a. Get two volunteers that are willing to read the cards or be dressed up
 - b. Decide what each volunteer is going to do, read or be dressed up.
 - c. The reader reads the card and finds the proper adaptive equipment to match the card.
 - d. Determine if it is a physical or behavioral adaptation(it is on the back of of the card).
 - e. Continue until all adaptations have been placed on the beaver.
 - f. Get photos if they give permission to do so.
 - g. Review once again the difference between behavioral and physical.
 - h. Remove each adaptation and replace in container while having the class recall what the adaptation is and whether it is physical or behavioral.
3. Conclusion
 - a. Have students share with a partner to explain to one another:
 1. The difference between a physical and behavioral adaptation
 2. Two examples of each adaptation.
 3. Two facts about a beaver.
 - b. Have students share out one adaptation with the group. No repeats!
You have to find a different one, so be good listeners!