

Objective

By the end of this lesson, you will understand how the environment influences the growth, survival, and adaptation of living things.

Materials and Prep

Materials: Notebook, pencil, access to outdoor space

Prior Knowledge: Understanding of basic biology concepts like living things, habitats, and adaptation

Activities

1. Nature Walk: Take a walk in your backyard or a nearby park. Observe different plants and animals. Note down how they interact with their environment.
2. Create a Habitat: Design a mini-habitat using materials like rocks, soil, and plants. Think about what living things would thrive in that habitat and why.
3. Adaptation Game: Imagine you are a bird with different beak shapes. Use different tools (tweezers, straws, etc.) to pick up different types of "food" (seeds, insects) to understand how beak shape affects what a bird can eat.

Talking Points

- Living things, like plants and animals, need certain things from their environment to survive and grow. For example, plants need sunlight for photosynthesis. Say, "Plants are like little solar panels; they use sunlight to make their food!"
- Animals have adaptations that help them survive in their habitats. For instance, polar bears have thick fur to keep them warm in cold environments. Explain, "Polar bears have their own cozy jackets to stay warm in the icy Arctic!"
- Changes in the environment can impact living things. Discuss how deforestation affects animals' habitats. Mention, "When trees are cut down, animals lose their homes and food sources."
- Some living things can adapt to changes in their environment over time. Show how chameleons change color to blend in with their surroundings. Say, "Chameleons are like nature's artists, changing colors to match their backgrounds!"