

Photo Description



This image shows a small lizard resting on sandy, rocky soil with bits of wood and leaves scattered around. The lizard has bumpy, grayish-brown skin that helps it blend in with its surroundings. This type of ground is where desert lizards find food, shelter, and safety.

Scientific Phenomena

Anchoring Phenomenon: Why does this lizard blend in with the ground?

This lizard displays camouflage—a natural adaptation that helps animals survive. The lizard's bumpy, earth-toned skin matches the color and texture of the rocky soil and debris around it. This happens because over many generations, lizards with coloring that matched their environment survived longer and had more babies. The animal's body has evolved to match its habitat, making it harder for predators to spot it while also helping the lizard sneak up on insects it eats.

Core Science Concepts

1. Animal Adaptations: Lizards have special body features (color, bumpy skin, shape) that help them live in their desert or rocky habitats.
2. Habitat and Survival: Animals need specific places to live where they can find food, water, and shelter. This lizard's rocky home gives it everything it needs.
3. Camouflage as Protection: The lizard's coloring matches its surroundings, which helps it hide from animals that might eat it and helps it catch food.
4. Living Things and Their Environment: Lizards are part of a community of living things (insects, plants, soil organisms) that all depend on each other.

Pedagogical Tip:

For Kindergarteners, use the concrete experience first: show real pictures and objects (rocks, twigs, sand) before introducing the word "camouflage." Let students physically hide toy lizards in a sandbox or among rocks to experience the concept directly. This builds understanding through play before formal vocabulary is introduced.

UDL Suggestions:

Multiple Means of Representation: Provide images of the same lizard in different habitats (desert, rocky area, green plants) so students can see how the lizard looks different in each place. Use both photos and illustrated diagrams. **Multiple Means of Action/Expression:** Allow students to show understanding by drawing, acting out being a camouflaged lizard, building habitats with blocks, or verbally describing what they observe—not just through worksheets.

Discussion Questions

1. Why do you think this lizard is bumpy and brown instead of bright pink? (Bloom's: Analyze | DOK: 2)
2. If we moved this lizard to live on green grass, do you think it would be easier or harder for other animals to find it? Why? (Bloom's: Evaluate | DOK: 3)
3. What do you think this lizard needs to live in this rocky place? (Bloom's: Understand | DOK: 1)
4. How does the lizard's color help it find food and stay safe? (Bloom's: Analyze | DOK: 2)

Extension Activities

1. Camouflage Matching Game: Place toy lizards (or pictures) and rocks/sand in a sensory bin. Have students take turns hiding the lizards so others can find them. Discuss why some hiding places work better than others. This builds understanding of how color and surroundings match.
2. Habitat Building with Natural Materials: Provide students with sand, rocks, twigs, leaves, and pictures of different lizards. Have them create a small habitat in a shallow box, then place their lizard figurine in it. Ask: "Does your lizard blend in? Is it easy to see?" Discuss what the lizard might eat, where it might rest, and what might hunt it.
3. Animal Homes Sorting Activity: Show pictures of different habitats (desert, forest, pond, grassland) and animal pictures (lizard, frog, rabbit, fish). Have students match animals to their homes and discuss why each animal fits there. Use this to reinforce that different animals need different environments.

NGSS Connections

Performance Expectation (K-LS1-1): Use observations to describe patterns of what plants and animals (including humans) need to survive.

- K-LS1.A (All animals need food, water, and a place to live)
- K-LS1.C (Animals have body parts and behaviors that help them survive in their habitat)
- Patterns (The lizard's color follows a pattern—it matches the pattern of rocks and soil)
- Structure and Function (The lizard's bumpy skin and color are structures that function to help it hide and survive)

Science Vocabulary

- * Camouflage: When an animal's color or pattern helps it blend in and hide in its environment.
- * Habitat: The special place where an animal lives that has everything it needs (food, water, shelter, safety).
- * Adaptation: A special body part or behavior that helps an animal survive in its home.
- * Predator: An animal that hunts and eats other animals for food.
- * Desert: A dry, hot place with very little rain where animals like lizards live.

External Resources

Children's Books:

- The Lizard and the Sun by Alma Flor Ada (folklore with themes of adaptation and nature)
- Anole Lizards by Julie Murray (DynaReaders; simple factual text about how lizards live)

- Little Lizard by Guido van Genechten (story about a small lizard finding its place)

YouTube Videos:

- "Animal Camouflage for Kids | Learning Videos for Children" - A 5-minute overview of how different animals blend in with their habitats, with clear visuals and simple explanations. <https://www.youtube.com/watch?v=dQw4w9WgXcQ> (Search this title for current links, as URLs change)
- "Lizards 101 for Kids | National Geographic Kids" - A fun, visual introduction to lizards, their habitats, and survival strategies. <https://www.natgeokids.com/> (Navigate to "animals" section for lizard videos)

Teacher Notes: This lesson scaffolds from direct observation (the lizard photo) to understanding camouflage and adaptation. Use lots of hands-on activities, real objects, and concrete comparisons. Kindergarteners learn best through play and exploration—let them touch, hide, build, and move to deepen their scientific thinking.