

Photo Description



This image shows a small lizard sitting on dirt and wood chips in its natural home. The lizard has bumpy, grayish-brown skin that helps it blend in with the ground around it. We can see the lizard's head, body, and tail as it rests among soil, twigs, and plant material.

Scientific Phenomena

Anchoring Phenomenon: A lizard living in and moving through its natural environment (habitat).

Why This Is Happening: Lizards are animals that need specific places to live where they can find food, water, and shelter. This lizard is in a habitat—a home that provides everything it needs to survive. The dirt, rocks, and wood chips create hiding spots and help the lizard stay safe from predators. The lizard's bumpy, earth-toned skin helps it hide by blending in with its surroundings, a survival strategy called camouflage. The lizard needs this habitat to eat insects, drink water, and rest safely.

Core Science Concepts

- * **Habitats:** Every animal needs a home (habitat) with the right soil, plants, rocks, and shelter to survive and meet its basic needs.
- * **Animal Characteristics:** Lizards are animals with skin, legs, and tails. They are cold-blooded, meaning their body temperature changes with their environment.
- * **Camouflage and Adaptation:** The lizard's brown and bumpy skin helps it blend with dirt and rocks. This adaptation helps protect it from danger.
- * **Basic Needs of Living Things:** All animals, including lizards, need food (insects), water, air, and shelter to stay alive and healthy.

Pedagogical Tip:

First graders learn best through direct observation and tactile experiences. Before discussing this image, consider bringing in safe materials (soil, twigs, rocks) for students to touch and explore. This multi-sensory approach helps anchor abstract concepts like "habitat" in concrete experience. You might also let students observe a bearded dragon or other classroom lizard (with proper care) to build genuine curiosity.

UDL Suggestions:

To support diverse learners: (1) Provide high-quality photos and real specimens for visual learners; (2) Use consistent hand motions when describing the lizard's body parts to support kinesthetic learners; (3) Create a "habitat corner" with actual soil, plants, and rocks where students can place toy lizards, supporting spatial and hands-on learners; (4) Offer word cards with pictures for students developing English language skills.

Discussion Questions

1. What does this lizard need to live in this place? (Bloom's: Remember | DOK: 1)
2. Why do you think the lizard's skin color is brown instead of bright red? (Bloom's: Analyze | DOK: 2)
3. If we took this lizard away from the dirt and rocks, what problems might it have? (Bloom's: Evaluate | DOK: 3)
4. What other animals do you think live in the same habitat as this lizard, and what would they need? (Bloom's: Create | DOK: 3)

Extension Activities

1. Habitat Hunt Walk: Take students on a short outdoor walk to find small habitats (under logs, in grass, near rocks). Have them observe and draw what animals or signs of animals they find. Discuss how different animals need different homes.
2. Create a Lizard Habitat in a Shoebox: Provide each student (or small group) with a shoebox, soil, rocks, sticks, and leaves. Have them create a safe home for a toy lizard. Ask: "What does your lizard need? Where will it hide? Where will it find food?" Display habitats and discuss similarities and differences.
3. Camouflage Art Activity: Provide students with brown and gray paint or markers and textured paper (sandpaper, crinkled brown paper). Have them paint or draw a lizard, trying to make it blend in with the textured paper. Display and discuss which lizards are hardest to see and why.

NGSS Connections

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

Disciplinary Core Ideas:

- K-LS1.A: All organisms have basic needs. Plants need sunlight, water, and minerals. Animals need food, water, and air.
- K-LS1.C: All animals eat plants or other animals.

Crosscutting Concepts:

- Patterns: Students observe patterns in animal behavior and habitat needs.
- Structure and Function: The lizard's body structure (bumpy skin, legs, tail) helps it function in its habitat.

Science Vocabulary

- * Habitat: The place where an animal lives and finds everything it needs to survive, like food, water, and shelter.
- * Camouflage: Colors or patterns on an animal's skin that help it hide and blend in with its surroundings so predators cannot see it easily.
- * Adaptation: A special body part or behavior that helps an animal survive in its home.
- * Shelter: A safe, protected place where an animal can rest and hide from danger.
- * Cold-blooded: An animal whose body temperature changes with the temperature of the air or ground around it (like lizards and snakes).

External Resources

Children's Books:

Lizards* by Mary Reavis Dunn (National Geographic Little Kids)

The Lizard and the Sun / La Lagartija y el Sol* by Alma Flor Ada

Bearded Dragons* by Adele Richardson (Pebble Books)

YouTube Videos:

* "Lizard Habitats for Kids" — A simple overview of where different lizards live and what they need. URL: https://www.youtube.com/results?search_query=lizard+habitats+for+kids

* "Amazing Lizard Camouflage" — Short clip showing how lizard colors help them hide. URL: https://www.youtube.com/results?search_query=lizard+camouflage+kids

Teacher Tip: Start with concrete observations ("What do you see?") before moving to abstract concepts ("Why does the lizard need this home?"). First graders benefit from building understanding through real objects and sensory experiences first.