

Photo Description



Scientific Phenomena

The Anchoring Phenomenon is animal adaptation for survival. The raccoon's distinctive features (facial mask, dexterous paws, striped tail) are adaptations that help it survive in its environment. The dark mask reduces glare and helps with night vision, while its hand-like paws allow it to manipulate objects and find food. These physical characteristics developed over time to help raccoons be successful in finding food, avoiding predators, and surviving in various habitats.

Core Science Concepts

1. Animal Body Parts and Functions: Raccoons have special body parts that help them survive, like their mask-like markings around their eyes and flexible paws that work like hands.
2. Habitat Requirements: Animals like raccoons need food, water, shelter, and space to live and grow.
3. Animal Behaviors: Raccoons are nocturnal (active at night) and use their senses to find food and stay safe.
4. Living vs. Non-living: The raccoon is a living thing that grows, moves, and needs food, while the tree stump it sits on was once living but is now non-living.

Pedagogical Tip:

Use real photographs like this one rather than cartoon animals to help students develop accurate scientific observations and avoid anthropomorphizing animals.

UDL Suggestions:

Provide multiple ways for students to express their observations, such as drawing, acting out animal movements, or using simple words to describe what they see.

Zoom In / Zoom Out

1. Zoom In: The raccoon's paws have sensitive nerve endings and muscles that allow precise movement, similar to how human hands work. Their eyes have special cells that help them see better in low light.
2. Zoom Out: Raccoons are part of a larger ecosystem where they interact with other animals, plants, and their environment. They help disperse seeds when they eat fruits and play a role in the food web as both predators and prey.

Discussion Questions

1. What do you notice about the raccoon's body parts that might help it survive? (Bloom's: Analyze | DOK: 2)
2. Where do you think this raccoon might find food and water? (Bloom's: Apply | DOK: 2)
3. How are a raccoon's paws different from your hands? (Bloom's: Compare | DOK: 2)
4. What other animals have you seen that have special markings on their faces? (Bloom's: Remember | DOK: 1)

Potential Student Misconceptions

1. Misconception: "Raccoons are dirty because they have black around their eyes."

Clarification: The black markings are natural fur coloring that helps reduce glare, like sunglasses.

2. Misconception: "Raccoons wash their food because they want to be clean."

Clarification: Raccoons wet their paws to make them more sensitive for feeling and examining food.

3. Misconception: "All animals sleep at night like people do."

Clarification: Some animals like raccoons are nocturnal and are most active at night when they hunt for food.

Cross-Curricular Ideas

1. Mathematics - Counting and Patterns: Count the stripes on the raccoon's tail or the rings in the tree stump's growth rings. Create simple patterns using black and gray colors to match the raccoon's markings. Practice sorting objects by size, like different types of food a raccoon might eat.

2. English Language Arts - Animal Storytelling: Have students dictate or draw a story about "A Day in the Life of a Raccoon." Create a simple class book with student illustrations and one-sentence descriptions of what raccoons do. Read aloud children's books about raccoons and act out the animal's movements and behaviors.

3. Art - Nature Sketching and Mask Making: Draw or paint raccoons using black, gray, and white colors. Create paper plate raccoon masks with black eye patches to wear during dramatic play. Make tree stump art by painting on circular paper plates and adding details like growth rings.

4. Social Studies - Community Helpers and Wildlife: Discuss how wildlife biologists and animal care workers help protect raccoons and other animals in our community. Learn about local parks and nature centers where animals like raccoons live near our homes.

STEM Career Connection

1. Wildlife Biologist: A scientist who studies animals like raccoons in nature. They watch animals, learn about their habits, and help keep them healthy and safe. These scientists go outside to forests, rivers, and parks to observe and protect animals. Average Salary: \$65,000 USD per year

2. Zookeeper: A person who takes care of animals at zoos and wildlife centers. Zookeepers feed animals, keep their homes clean, and make sure they stay healthy and happy. They help visitors learn about animals like raccoons. Average Salary: \$32,000 USD per year

3. Veterinarian: A doctor who helps sick and hurt animals feel better. Veterinarians examine animals, give medicine, and perform check-ups to keep animals healthy. They might help injured wild raccoons or care for pet animals. Average Salary: \$95,000 USD per year

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.C - All animals need food in order to live and grow
- Crosscutting Concepts: Patterns - Patterns in the natural and human designed world can be observed and used as evidence

Science Vocabulary

- * Adaptation: A special body part or behavior that helps an animal survive
- * Nocturnal: Active during the night time
- * Habitat: The place where an animal lives and finds everything it needs
- * Mammal: An animal that has fur and feeds milk to its babies
- * Omnivore: An animal that eats both plants and other animals

External Resources

Children's Books:

- Raccoons by Emily Rose Townsend
- A Raccoon Family by Sarah Eason
- Raccoon Moon by Nancy Shaw