

## Photo Description



A raccoon is resting on a tree stump in a shady area. The raccoon has gray and black fur with a black mask around its eyes. You can see green plants and trees all around the raccoon in its forest home.

## Scientific Phenomena

The Anchoring Phenomenon is animal adaptation and habitat selection. The raccoon is demonstrating behavioral adaptation by choosing to rest in a shaded area during the day. This happens because raccoons are nocturnal animals - they are naturally active at night and sleep during the day. The tree stump provides a safe, elevated resting spot that allows the raccoon to observe its surroundings while staying cool in the shade. The forest habitat provides everything the raccoon needs: food, water, shelter, and space.

## Core Science Concepts

1. Animal Habitats: Animals live in places that meet their basic needs for food, water, shelter, and space
2. Physical Adaptations: The raccoon's black "mask" reduces glare, and its dexterous paws help it manipulate food and objects
3. Behavioral Adaptations: Resting during the day and being active at night helps raccoons avoid predators and competition
4. Forest Ecosystems: Different plants and animals live together and depend on each other in forest environments

### Pedagogical Tip:

Use the "Think-Pair-Share" strategy when introducing animal adaptations. Have students first think individually about what they notice about the raccoon, then discuss with a partner, and finally share with the class. This builds confidence and ensures all voices are heard.

### UDL Suggestions:

Provide multiple ways for students to demonstrate their understanding of animal habitats: drawing, acting out animal behaviors, creating habitat dioramas, or using digital tools to show what animals need to survive.

## Zoom In / Zoom Out

1. Zoom In: The raccoon's sensitive whiskers contain nerve endings that help it navigate in the dark and identify objects by touch. Its paws have specialized nerve receptors that work almost like human fingertips.
2. Zoom Out: This raccoon is part of a larger forest food web, where it serves as both predator (eating insects, small animals, fruits) and prey (for larger predators like coyotes). The forest ecosystem depends on many interconnected relationships between plants and animals.

### Discussion Questions

1. What do you notice about where this raccoon chose to rest, and why might that be a good spot? (Bloom's: Analyze | DOK: 2)
2. How do you think the raccoon's black mask might help it survive in the wild? (Bloom's: Apply | DOK: 2)
3. What would happen if there were no trees or logs in this raccoon's habitat? (Bloom's: Evaluate | DOK: 3)
4. How are raccoons similar to and different from other animals that live in forests? (Bloom's: Compare | DOK: 2)

### Potential Student Misconceptions

1. Misconception: "Raccoons are dirty because they have black around their eyes"  
Clarification: The black markings are natural fur coloration that helps reduce glare, similar to how football players use black paint under their eyes
2. Misconception: "All animals sleep at night like people do"  
Clarification: Many animals are nocturnal (active at night) or crepuscular (active at dawn and dusk) - this helps them find food and avoid predators
3. Misconception: "Raccoons wash their food because they're clean"  
Clarification: Raccoons wet their paws to make them more sensitive for feeling and examining food, not necessarily to clean it

### Cross-Curricular Ideas

1. ELA - Animal Fact Writing: Students write or dictate 2-3 simple sentences about raccoons using the "I learned that..." sentence frame. They can illustrate their writing with drawings of raccoons in their habitats, creating an informational class book.
2. Math - Habitat Counting & Measurement: Students count objects in the photo (tree stumps, plants, leaves) and practice measurement by estimating how tall the tree stump might be compared to a raccoon or a second grader. Create bar graphs showing "How many animals live in different habitats?"
3. Art - Nocturnal Animal Collage: Students create a nighttime forest scene using dark colors (blacks, dark blues, purples) and cut out animal shapes to show animals that are active at night. This reinforces the behavioral adaptation concept while developing fine motor skills.
4. Social Studies - Community Helpers Connection: Invite a local wildlife biologist, park ranger, or animal shelter worker to visit the classroom (virtually or in-person) to discuss how they protect animals and their habitats. Students can ask questions and create "thank you" posters for community helpers who care for wildlife.

### STEM Career Connection

1. Wildlife Biologist: A wildlife biologist is a scientist who studies animals in nature to learn how they live, what they eat, and where they make their homes. They observe animals like raccoons to help protect them and keep their habitats safe and healthy. Average Salary: \$68,000/year

2. Park Ranger: A park ranger takes care of forests and natural areas where wild animals live. They make sure the habitats stay clean and healthy, teach visitors about animals like raccoons, and protect the plants and trees that animals need to survive. Average Salary: \$42,000/year
3. Veterinarian (Wildlife Specialist): A wildlife veterinarian is a doctor for wild animals. When raccoons or other forest animals get sick or injured, these doctors help heal them so they can return safely to their habitats. Average Salary: \$97,000/year

### NGSS Connections

- Performance Expectation: 2-LS4-1 - Make observations of plants and animals to compare the diversity of life in different habitats
- Disciplinary Core Ideas: 2-LS4.A - There are many different kinds of living things in any area, and they exist in different places on land and in water
- Crosscutting Concepts: Patterns - Patterns in the natural world can be observed and used as evidence

### Science Vocabulary

- \* Habitat: The place where an animal lives and gets everything it needs to survive
- \* Adaptation: Special features or behaviors that help animals survive in their environment
- \* Nocturnal: Active during the night and sleeping during the day
- \* Ecosystem: All the living and non-living things in an area that work together
- \* Predator: An animal that hunts and eats other animals
- \* Omnivore: An animal that eats both plants and other animals

### External Resources

Children's Books:

- Raccoons by Emily Rose Townsend
- A Raccoon's World by Caroline Arnold
- Raccoon on His Own by Jim Arnosky