

## Photo Description



A raccoon sits on a big tree stump. The raccoon has gray and black fur with a black mask around its eyes. It has a long striped tail and small ears.

## 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.

### 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

YouTube Videos:

- "Raccoons for Kids" - Educational video about raccoon facts and behaviors: <https://www.youtube.com/watch?v=hFZFjoX2cGg>
- "Wild Kratts - Raccoon Powers" - Animated exploration of raccoon adaptations: <https://www.youtube.com/watch?v=4Yqol84HdSM>