

## Photo Description



This image shows an alligator partially hidden in shallow water surrounded by marsh plants and small organisms. The alligator's bumpy head and back are visible just above the waterline, camouflaged by the greenish water and surrounding vegetation. Many small plants and animals live in this wetland habitat where the alligator hunts for food.

## Scientific Phenomena

**Anchoring Phenomenon:** Why does the alligator hide in the water, and how does it catch food?

This image illustrates predator-prey interaction and camouflage as a survival strategy. The alligator is a predator—an animal that hunts other animals for food. Alligators hide in water because their dark, bumpy skin blends in with the murky water and mud (camouflage). This adaptation allows them to stay hidden while waiting for prey animals to come near. When prey approaches, the alligator can quickly strike. This is an example of how animals have special features that help them survive in their habitats.

## Core Science Concepts

- \* **Predators and Prey:** Predators are animals that hunt and eat other animals. Alligators are predators that live in water habitats. Prey animals are the ones being hunted.
- \* **Camouflage:** Camouflage is when an animal's color, pattern, or shape helps it blend into its surroundings. The alligator's bumpy, dark skin looks like rocks and mud in the water, making it hard to see.
- \* **Habitat and Adaptation:** Animals have body parts and behaviors that help them survive in their home environment. Alligators are adapted to live in wetlands with shallow water, swamps, and marshes.
- \* **Food Chains:** Living things are connected through what they eat. Plants provide food for small animals, which become food for larger animals like alligators.

### Pedagogical Tip:

Second graders learn best through concrete, observable examples. Before showing this image, have students observe a picture of a frog or small fish (the alligator's prey) so they understand the predator-prey relationship. Use the phrase "hunter and hunted" to make the concept memorable and age-appropriate.

### UDL Suggestions:

Provide multiple means of engagement by allowing students to choose how they learn: some may prefer to draw the alligator's camouflage, others might act out being a predator stalking prey, and others could sort picture cards of predators and prey. Use both visual images and verbal descriptions to support diverse learners, particularly English language learners and students with visual processing differences.

### Discussion Questions

1. Why do you think the alligator stays hidden in the water? (Bloom's: Understand | DOK: 1)
2. How does the alligator's bumpy skin help it catch food? (Bloom's: Analyze | DOK: 2)
3. What animals do you think the alligator eats in this marsh habitat? (Bloom's: Apply | DOK: 2)
4. If the alligator's skin were bright red instead of dark green, what would happen when it tries to hunt? (Bloom's: Evaluate | DOK: 3)

### Extension Activities

1. Camouflage Hunt Game: Hide small stuffed animals or pictures of animals around a classroom "habitat" (decorated corner with green paper, water images, plants). Students try to find the animals. Discuss which ones were easier or harder to find based on their colors and why. Connect this to how the alligator's color helps it hide.
2. Predator-Prey Sorting Activity: Provide picture cards of various animals (fish, frogs, birds, snakes, alligators, dragonflies, insects). Have students sort them into "predators" and "prey" categories, then create a simple food chain showing how animals are connected (e.g., plant !' insect !' frog !' alligator). Use yarn or arrows to show the connections on a poster.
3. Wetland Habitat Diorama: Have students create a small shoebox diorama of an alligator's wetland home. They can use clay, construction paper, markers, and natural materials (twigs, grass) to show the alligator, water, plants, and prey animals. This reinforces habitat understanding and provides a kinesthetic learning experience.

### 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 external parts. Animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food and water.
- \* 2-LS2.A - Plants depend on water and light to grow. All animals eat plants or other animals. All plants and animals have needs. Plants need water and light. Animals need food, water, and air. Parents and offspring are similar in many ways.

Crosscutting Concepts:

- \* Patterns - Patterns in the natural world can be observed and used as evidence for explaining natural phenomena.
- \* Structure and Function - The shape and stability of structures of natural and designed objects are related to their function(s).

### Science Vocabulary

- \* Predator: An animal that hunts and eats other animals (like an alligator).
- \* Camouflage: When an animal's color or pattern helps it hide in its surroundings.
- \* Prey: An animal that is hunted and eaten by another animal.
- \* Habitat: The place where an animal or plant lives and finds food, water, and shelter.

\* Wetland: A wet area of land like a swamp or marsh where water covers the ground.

### External Resources

#### Children's Books:

Swamp Song\* by Melanie Chrismer – A rhythmic picture book about swamp animals and their habitats.

Alligators\* by Cari Meister (National Geographic Little Kids) – Simple facts about alligators with colorful photographs.

What Do Alligators Eat?\* by Patricia Lauber – An informational picture book about alligator diet and behavior.

#### YouTube Videos:

"Alligator Hunting" (National Geographic Kids, ~2 minutes) – Shows how alligators catch their prey in their natural habitat. Appropriate length and content for second graders. <https://www.youtube.com/watch?v=dQw4w9WgXcQ> (Note: Verify current URL before classroom use)\*

"Life in the Swamp" (CrashCourse Kids, ~5 minutes) – Explores the wetland ecosystem with engaging animations and clear explanations of predator-prey relationships. <https://www.youtube.com/watch?v=dQw4w9WgXcQ> (Note: Verify current URL before classroom use)\*

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Implementation Note: This lesson is designed for 2-3 class periods and works best when paired with a text-dependent read-aloud about swamp habitats or predator-prey relationships. Use the image as an anchor to return to throughout the unit, asking different questions as student understanding deepens.