



Turtle Trek

Adaptation Adventures of Sea Turtles

Essential Question:

- What adaptations do sea turtles have? And how do they use them to survive?

Audience: Grades 1 - 5

Learning Objective(s):

- Learn what an adaptation is and how they improve an animal's ability to survive - specifically sea turtles.

North Carolina Standards:

Kindergarten

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

1st Grade

- 1-LS1-2: Crosscutting concept, patterns: patterns in the natural and human designed phenomena, and used as evidence.

2nd Grade

- 2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats.

4th Grade

- LS.4.1: Understand the effects of environmental changes, adaptations, and behaviors that enable organisms to survive in changing habitats.

Next Generation Science Standards:

1st Grade

- 1-LS1-1: Use materials to design a solution to a human problem by mimicking how plants/animals use their external parts to help them survive, grow, and meet their needs.

2nd Grade

- 2-PS1-2: Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- K-2-ETS1-3: Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

4th Grade

- 4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.



Background Information:

Adaptations are a physical or behavioral feature of an animal that helps them better survive in their environment, called **habitats**. Animals can have something on their body or something they do with their body to help them survive. Just like we wear warm clothes in winter and drink water when we're thirsty, animals and plants have their own ways of staying safe and comfortable.

Animals have different body parts and behaviors that help them live in different places. Let's look at a few examples:

- Camouflage: Some animals, like chameleons and certain insects, have colors and patterns that help them blend into their surroundings. This makes it harder for other animals to see them and catch them.
- Migration: Some animals need to move to different places throughout the year to get to warm waters to stay warm, or to look for the food they like to eat.
- Shapes and sizes: Some animals have specific mouths to help them eat the foods they need or specifically shaped feet to help walk or swim faster.

Vocabulary

- Adaptation:
- Habitat:
- Camouflage:
- Migration:

Questions

1. Name three examples of adaptations that animals may have.

2. Given a few examples, what types of adaptations do you think sea turtles have?



KWL

Directions: Prior to completing our activity component, complete the **K** and **W** parts of the chart below. You will fill out the **L** after the activity.

K What do you already <u>know</u> ?	W What do you <u>want</u> to learn?	L What did you <u>learn</u> ?



Teacher Answer Sheet - Pre/Post-Content:

Vocabulary

- **Adaptation:** physical or behavioral feature of an animal that helps them better survive in their environment
- **Habitat:** The place where plants/animals/other living things live.
- **Camouflage:** When an animal blends in with its surroundings, making it difficult to see.
- **Migration:** When animals move from one place to another.

Questions

1. Name three examples of adaptations that animals may have.
Physical : Camouflage, body shape, flippers, feet, claws, fur, webbed, feet.
Behavioral: migration, hibernation, nocturnal
Physiological: cold-blooded, venom, store water
2. Given a few examples, what types of adaptations do you think sea turtles have?
 - a. Flippers - front to swim, rear to turn
 - b. Beaks- different shapes dependent on what they like to eat.
 - c. Carapace shape
 - d. Carapace color
 - e. Nails on front flippers
 - f. Carapace and plastron

Post- Content Ideas

- Have students do an adaptation research project. Either of the different species of sea turtles or an animal of their choosing. Present with a presentation or written paper.
- Have students create their own animal with different adaptations. They must be able to explain why they gave the animal they created each adaptation and how it will improve their likelihood of survival.