

RESOURCE LIBRARY  
ACTIVITY : 25 MINS

## Animal Adaptations in the Ocean

Students review what animal adaptations are, identify marine animal adaptations in a photo gallery, and predict how types of adaptations vary with ocean habitats.

### GRADES

6 - 8

### SUBJECTS

*Biology*

### CONTENTS

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## OVERVIEW

Students review what animal adaptations are, identify marine animal adaptations in a photo gallery, and predict how types of adaptations vary with ocean habitats.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/animal-adaptations-ocean/>

## DIRECTIONS

### 1. Introduce or review the concept of adaptations.

Write the word *adaptation* on the board. Ask students to define this word as it relates to animals. Ask:

- *Why do animals have special adaptations to their habitats?*
- *What examples of animal adaptation can you think of near where you live?*
- *What types of adaptations in marine animals have you previously learned about?*

Encourage students to think about adaptations in marine animals related to obtaining food, providing camouflage or safety from predators, or dealing with changes in temperature, salinity, pressure, lack of sunlight, and need for oxygen.

## **2. Have students identify animal adaptations in a National Geographic photo gallery.**

Show students the photo gallery and have them take turns reading aloud the captions as the class looks at each photo. Ask students to identify information about adaptations in each caption. For those captions that do not include adaptation information, challenge students to find visual evidence of adaptation. For example, needlefish travel in schools to protect themselves from predators; their color and size help them blend into their surroundings. Portuguese man-of-wars have air bladders that allow them to float on or near the surface of the ocean. These communal organisms use their air bladders like sails, allowing wind to move them through the water. The green sea turtle's shell protects it from predators.

## **3. Have students make predictions about ocean habitats.**

Ask students to predict how different ocean habitats might affect the animal adaptations seen there. Ask:

- *How different is life at the surface of the ocean from life at the bottom?*
- *What types of adaptations might marine animals need to have near the surface versus near the bottom?*

# OBJECTIVES

## Subjects & Disciplines

**Biology**

## Learning Objectives

Students will:

- identify visual evidence of adaptations
- make predictions about how marine animal adaptations vary by habitat

## Teaching Approach

- Learning-for-use

# Teaching Methods

- Discussions
- Visual instruction

# Skills Summary

This activity targets the following skills:

- Critical Thinking Skills
  - Understanding
- Geographic Skills
  - Acquiring Geographic Information

# National Standards, Principles, and Practices

## NATIONAL SCIENCE EDUCATION STANDARDS

- (5-8) Standard C-5:

Diversity and adaptations of organisms

### **Preparation**

### **What You'll Need**

## REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector

## PHYSICAL SPACE

- Classroom

## GROUPING

- Large-group instruction

## BACKGROUND & VOCABULARY

### Background Information

Animals adapt to their environments to help them survive. Ocean animals have unique adaptations depending on what ocean habitat they live in.

### Prior Knowledge

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### Recommended Prior Activities

- [Ocean Habitats and Animal Adaptations](#)

### Vocabulary

Term	Part of Speech	Definition
adaptation	<i>noun</i>	a modification of an organism or its parts that makes it more fit for existence. An adaptation is passed from generation to generation.
habitat	<i>noun</i>	environment where an organism lives throughout the year or for shorter periods of time.
marine	<i>adjective</i>	having to do with the ocean.
predator	<i>noun</i>	animal that hunts other animals for food.
salinity	<i>noun</i>	saltiness.

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### For Further Exploration

#### Websites

- [National Geographic Animals](#)
- [National Geographic Environment: The Ocean](#)

# FUNDER



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