

RESOURCE LIBRARY  
ACTIVITY : 45 MINS

## Prehistoric Animal Adaptations

Students investigate adaptations—changes in body parts or behaviors—that helped prehistoric marine reptiles survive in the Cretaceous period.

### GRADES

3 - 5

### SUBJECTS

*Biology, Geography, Physical Geography*

### CONTENTS

1 PDF

## OVERVIEW

Students investigate adaptations—changes in body parts or behaviors—that helped prehistoric marine reptiles survive in the Cretaceous period.

For the complete activity with media resources, visit:

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

## Program



## DIRECTIONS

### 1. Introduce vocabulary and have students brainstorm.

Introduce the term adaptation to students. An adaptation is a behavior or body part modification (change) that helps an animal survive where it lives. Explain that adaptations can

occur through modified behavior or modified body parts. Provide students with two examples of modified behavior: working in groups and swimming in schools to avoid predators. Then provide students with three examples of modified body parts: chemical defense, camouflage, and different limb shapes. Ask students to brainstorm other examples of adaptations. (Modified body parts such as eyes—ability to see at night, ability to see far away, ability to see under water, keen sense of smell, large teeth, many teeth, claws, body size; modified behaviors such as playing dead, food selection, migration)

## **2. Have a whole-class discussion.**

Tell students that, like modern day animals, prehistoric animals also adapted body parts and behaviors in order to survive. Ask students to predict what adaptations—body parts or behaviors—helped sea creatures that lived 82 million years ago to survive.

## **3. If possible, watch the film.**

Have students view *Sea Monsters: A Prehistoric Adventure* to confirm or revise their predictions. Ask students to describe some of the challenges that the prehistoric marine reptiles faced in the film. (protecting their young; defending themselves; finding food)

## **4. Distribute the worksheet.**

Distribute the worksheet *Animal Adaptations* to each student. As a class, review the model of the giraffe. Next, have students participate in a guided classroom discussion or do library or online research to complete the rest of the worksheet.

## **5. Have students reflect on what they learned.**

Ask students to discuss what they learned about adaptations in modern and prehistoric animals.

# Extending the Learning

Go to the [Sea Monsters](#) website to find out more about sea monsters and to find a list of theaters where you can see the film *Sea Monsters: A Prehistoric Adventure*.

## OBJECTIVES

# Subjects & Disciplines

**Biology**

**Geography**

- Physical Geography

# Learning Objectives

Students will:

- explain how adaptations help animals survive
- identify different types of adaptations

# Teaching Approach

- Learning-for-use

# Teaching Methods

- Brainstorming
- Discussions
- Research

# Skills Summary

This activity targets the following skills:

- Critical Thinking Skills
  - Understanding

# National Standards, Principles, and Practices

## NATIONAL GEOGRAPHY STANDARDS

- Standard 17:

How to apply geography to interpret the past

## NATIONAL SCIENCE EDUCATION STANDARDS

- (K-4) Standard C-1:

The characteristics of organisms

## Preparation

### What You'll Need

#### MATERIALS YOU PROVIDE

- Pencils
- Pens

#### REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector, Speakers
- Plug-Ins: Flash

#### PHYSICAL SPACE

- Classroom

#### GROUPING

- Large-group instruction

## BACKGROUND & VOCABULARY

### Background Information

Animals undergo adaptations—changes to body parts and behaviors—that help them survive. Adaptations can occur through modified behavior or modified body parts.

### Prior Knowledge

[]

### Recommended Prior Activities

- [How Scientists Name Things](#)

# 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.
behavior	<i>noun</i>	anything an organism does involving action or response to stimulation.

---

## For Further Exploration

### Interactives

- [National Geographic Magazine: Monsters of the Ancient Sea](#)

### Websites

- [National Geographic: Sea Monsters—A Prehistoric Adventure](#)

## FUNDER



This material is based in part upon work supported by the National Science

Foundation under Grant No. DRL-1114251. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.



© 1996-2023 National Geographic Society. All rights reserved.