

RESOURCE LIBRARY
ACTIVITY : 20 MINS

Meet a Paleontologist

Students discuss the work of paleontologists. Then they read excerpts from an interview with paleontologist Paul Sereno, a National Geographic Explorer-in-Residence, who discovered SuperCroc in sub-Saharan Africa.

GRADES

3 - 5

SUBJECTS

Geology, English Language Arts, Geography, Physical Geography

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OVERVIEW

Students discuss the work of paleontologists. Then they read excerpts from an interview with paleontologist Paul Sereno, a National Geographic Explorer-in-Residence, who discovered SuperCroc in sub-Saharan Africa.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/meet-a-paleontologist/>

Program



DIRECTIONS

1. Build background.

Show students the photo of paleontologists working on a fossil dig. Ask students to describe what is happening in the photo. Remind students to use observational skills to look for tools, geographic clues, and the work being done.

2. Introduce paleontologist Paul Sereno.

Tell students that scientist Paul Sereno searches for, discovers, and studies fossil remains. Explain that scientists who do this work are paleontologists. Explain to students that on a dig in sub-Saharan Africa, Sereno discovered the fossil remains of *Sarcosuchus imperator*, a name that means “flesh crocodile emperor”. Ask: *Why do you think its nickname is SuperCroc?* Tell students that SuperCroc was one of the largest crocodylians to ever walk the Earth. This SuperCroc was 12 meters (40 feet) long—as long as a city bus—and weighed about 8 metric tons (17,500 pounds).

3. Distribute the handout.

Distribute the handout Meet a Paleontologist to each student. Read aloud the introduction.

4. Have students read the interview aloud.

Ask a pair of students to read the adapted interview aloud, with each student playing the role of interviewer or interviewee.

5. Check students' comprehension.

Check students' comprehension. Write new vocabulary words on the board and discuss them with students. Have students answer the following questions on a separate piece of paper and then discuss them as a class.

- *Why does Paul Sereno think science is fun?* (He believes that science is all about discovery and creativity, and asking questions or finding answers that no one else has.)
- *Why does Paul Sereno think it is important to study dinosaurs?* (Dinosaurs are a connection to the distant past, a time that we can only dream about or think about scientifically.)
- *Where did Paul Sereno find SuperCroc?* (in Africa)
- *What did SuperCroc look like?* (Its skull was 2 meters, or 6 feet, long and its body was 12 meters, or 40 feet, long.)
- *Why do you think it is named SuperCroc?* (This prehistoric crocodile was twice as long and many times heavier than modern crocodiles.)

6. Have students brainstorm questions.

Ask students to brainstorm additional questions they might have about paleontologists and their work. Write the list on the board.

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*. Encourage students to look for answers to their questions from Step 6 as they watch the film *Sea Monsters: A Prehistoric Adventure*.

OBJECTIVES

Subjects & Disciplines

Earth Science

- Geology
- English Language Arts

Geography

- [Physical Geography](#)

Learning Objectives

Students will:

- explain the work of paleontologists
- describe SuperCroc

Teaching Approach

- Learning-for-use

Teaching Methods

- Brainstorming
- Discussions
- Multimedia instruction

- Reading

Skills Summary

This activity targets the following skills:

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

National Standards, Principles, and Practices

IRA/NCTE STANDARDS FOR THE ENGLISH LANGUAGE ARTS

- Standard 3:

Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

NATIONAL GEOGRAPHY STANDARDS

- Standard 17:

How to apply geography to interpret the past

NATIONAL SCIENCE EDUCATION STANDARDS

- (K-4) Standard G-1:

Science as a human endeavor

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Paper
- Pencils

REQUIRED TECHNOLOGY

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

GROUPING

- Large-group instruction

BACKGROUND & VOCABULARY

Background Information

Paleontology is a science dealing with the life of past geological periods as known from fossil remains. Paleontologists look for, discover, excavate, and study fossils to learn about life on Earth during prehistoric times.

Prior Knowledge

Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
fossil	<i>noun</i>	remnant, impression, or trace of an ancient organism.
fossil dig	<i>noun</i>	site of a field study or excavation by paleontologists or archaeologists.
paleontologist	<i>noun</i>	person who studies fossils and life from early geologic periods.
paleontology	<i>noun</i>	the study of fossils and life from early geologic periods.

Term	Part of Speech	Definition
SuperCroc	<i>noun</i>	prehistoric crocodile that lived in Africa and grew to lengths of 11-12 meters (37-40 feet).

For Further Exploration

Articles & Profiles

- [National Geographic Explorer-in-Residence: Paul Sereno—Paleontologist](#)

Websites

- [National Geographic: SuperCroc](#)
- [National Geographic: Sea Monsters—A Prehistoric Adventure](#)
- [University of California: Museum of Paleontology](#)

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.

