

# Teacher Guide: Fossil Storybook

## Concepts:

- Fossils provide important evidence of past species and help us reconstruct the history of life on Earth. Most fossil species are extinct, but they are related to animals still living today.

## Learning objectives:

- Students will learn about a particular fossil on exhibit at the museum, including what organism it was, when it lived, and how it was preserved.
- Students will engage in guided research about their chosen fossils and create illustrated storybooks to show what they have learned.
- Students will learn that paleontologists are scientists who study fossils.

## TEKS: Grades K-4

- Kindergarten: 2A, 3B, 3C, 4A, 4B, 9B, 10A, 10B
- Grade 1: 2A, 3B, 3C, 4A, 4B, 10A
- Grade 2: 2A, 3B, 3C, 4A, 9B, 10A
- Grade 3: 3A, 9A (STAAR Supporting Standard), 10A
- Grade 4: 3A, 7C (STAAR Supporting Standard)

**Location:** Hall of Geology and Paleontology (1<sup>st</sup> Floor)

**Time:** About 15 minutes at the museum; 1 class period

## Supplies:

- For the museum: pencils, clipboards, “My Fossil” worksheet
- For the classroom: pencils, colored pencils or crayons, printed and stapled blank storybooks (“The Story of a Fossil”)

## Vocabulary:

- *fossil, extinct, scientific name, common name, Cretaceous, Ice Age, reptile, mammal, erode*

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## Pre-Visit:

Students should be somewhat familiar with fossils, extinct animals, and the idea “millions of years” (geologic time) before visiting the museum. They may have heard of or seen *Jurassic Park* or *Jurassic World*—you can use these movies to spark interest and to introduce the idea that fossils tell us about past animals that no longer exist today. Students should pick a fossil from either the Cretaceous sea life (mosasaur, plesiosaur, sea turtle or fish cases) or the Ice Age section of the gallery and complete the “My Fossil” worksheet using information from the fossil’s name label. (The Cretaceous sea life and Ice Age exhibit cases were chosen because they provide a variety of animals and demonstrate fossilization processes that take place in marine and terrestrial environments, respectively).

## Post-Visit:

Have students answer the “Further Research” questions about their selected organisms by reading books, handouts, or searching the Internet

Read one or more illustrated children’s books about fossils in class to give students ideas for their own storybook projects. (See below for suggested books.)

Have students create their own fossil storybooks using the information they collected. They can illustrate the books using colored pencils or crayons. **To create booklets:** print the “The Story of a Fossil” double-sided, then fold pages along the dotted lines and staple 2-3 times on the fold. (At first, the pages will seem out of order, but that is so that they can be printed double-sided.) Make sure to print the different booklets for students doing Cretaceous and Ice Age fossils.

## Recommended Readings

*Fossils Tell of Long Ago* by Alik

*Monster Bones: A Story of a Dinosaur Fossil* by Jacqui Bailey

*The Fossil Factory: A Kid's Guide to Digging Up Dinosaurs, Exploring Evolution, and Finding Fossils* by Niles, Douglas, and Gregory Eldredge

*Fossil* by Claire Ewart

*Barnum's Bones: How Barnum Brown Discovered the Most Famous Dinosaur in the World* by Tracey Fern

*Rock and Fossil Hunter* (Smithsonian Nature Activities) by Ben Morgan

*Figuring out Fossils* (Early Bird Earth Science) by Sally M. Walker

# My Fossil

In this activity, you will observe and research one of the fossils in the Hall of Geology and Paleontology (1<sup>st</sup> Floor). ***Make sure to choose a fossil made of bone from the Cretaceous sea life or Ice Age section!***

Fossil name: \_\_\_\_\_

Note: Sometimes the names of fossils are listed as two *italicized* words, which are the full scientific name (genus and species). For this activity, you only need to write down the first italicized word (the genus). If there is a common name like Scimitar-toothed Cat, you can use that name.

**Read the fossil's name label to get some important information:**

What kind of animal is your fossil? For example, it might be a reptile or a mammal.

Where was the fossil discovered?

Is the fossil of the whole skeleton or just part? If it is only part—which bone(s)?

Does it remind you of any other animals living today?

What geologic time period is it from? Cretaceous or Ice Age

What years did this time period cover?

Sketch your fossil here:

# Further Research

When you get back to your school or home, look up a little more information about your fossil animal. What kind of habitat did your fossil animal live in? (ocean, in freshwater, or on land)

What did your fossil animal eat?

Which animals living today are most closely related to your fossil animal (living relatives)?

How many years old is your fossil? (Hint: Look up when that type of animal lived. You can give a range of dates.)

Did your type of fossil animal go extinct? If so, when?

What is one other interesting fact about your fossil animal?