

Astounding Adaptations

Middle - High School Natural Selection and Adaptations

Duration

30-45 minutes

Location

La Brea Tar Pits Museum

Supplies

- Worksheet
- Pencil
- Clipboard (optional)

Standards

MS/HS-LS4.C

S+E Practices

4, 6, 7, 8

CCSS

WHST.9

Vocabulary

Adaptation · Natural Selection · Selection Pressure · Evolution · Observation · Inference · Hypothesis · Habitat

Concepts

- Scientists infer how ancient animals survived using observational evidence from fossils.
- Pressures from the environment drive adaptation and evolution.

Objectives

- Students will observe specimens and identify adaptations.
- Students will make inferences about how animals survived.
- Students will hypothesize about a specimen's habitat (Pleistocene Los Angeles) and how different adaptations might help specific animals survive.

Outline

- 1. This lesson assumes that students know what adaptations are and how they relate to evolution. If necessary, introduce the idea of evolution by natural selection before your visit if it has not already been explored.
- 2. At the Museum, allow students to explore the exhibits, then focus on a single specimen to complete the worksheet.

Pre-Visit

If necessary, review the concept of adaptation, and evolution by natural selection with students. At the Museum, students should be prepared to identify the adaptations of specific specimens.

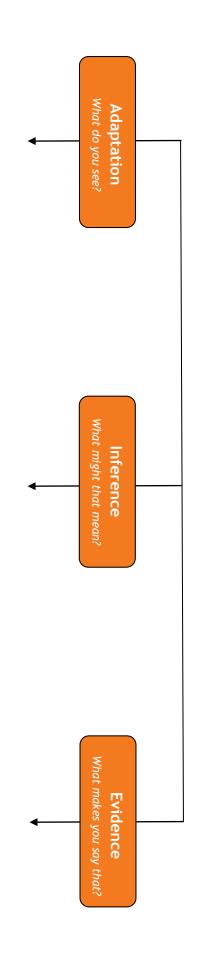
Museum Visit

At the Museum, students will explore the exhibits and then choose one animal to focus on for their worksheet.



Adaptations as Evidence

Adaptations tell us how animals used to live. Choose a specimen to observe closely in the Museum and write its name on the top of the Tree fer what those might mean for the life of the animal. Back up your inferences with evidence, i.e. what do you see that makes you say that? Map. Using your own observations, and any information available in the Museum, complete the Tree Map. First, note its adaptations and in-





Environment and Adaptations

Many generations of natural selection have resulted in the adaptations you noticed on your specimen. With this in mind, answer the following questions. Use additional paper if necessary.

1.	Based on your observations and any other information from the Museum, what do you think your animal's environment was like?
2.	How would its adaptations help it survive in that environment?
2	
3.	Do your animal's adaptations give you any clues about its behavior? (how it moved, what it ate, how it hunted etc.)