



Teachable Moments: *Antarctic Dinosaurs*

Grades 1 - 12

Duration

30 minutes

Location

Antarctic Dinosaurs
Exhibit, Ground Level

NGSS Alignment

DCIs

3-LS4-1

4-ESS1-1

4-ESS2-2

MS-LS4-1,2

MS-ESS2-3

HS-LS4-5

HS-ESS1-5

S+E Practices

1,3, 4

Crosscutting Concepts

1, 7

CA EP&Cs

III.a

Materials for Museum Visit:

Paleontology Field
Journal (included in
Educator Exhibit
Guide)

Clipboards

Pencils

Section 1 | Journey to Antarctica

Highlight Pieces: Terra Nova Sledge and Extreme Cold Weather (ECW) Gear

What type of weather is the gear on exhibit well-suited for? What might be challenging about working while wearing gear like this?

MS/HS Extension: Ask your students to consider the pros and cons of the different gear used for Antarctic expeditions over the past century. How might the type of gear used affect the success of expeditions?

Section 2 | Fossil Hunting in Antarctica

Ask your students to consider: What is a fossil? Discuss with your students the different types of materials that can fossilize.

MS/HS Extension: What other types of evidence of life from the past can be preserved?

Section 3 | Antarctica: Before the Dinosaurs

Highlight Piece: *Glossopteris* fossils

What does knowing that *Glossopteris* grew in Antarctica tell us about the climate of Antarctica during the Permian Period?

MS/HS Extension: What other places in the world have these fossils been found? What does this tell us about how continents may have shifted over time?

Section 4 | The World of Antarctic Dinosaurs

Ask your students to share some of their observations of the specimens from this time period, and reflect on what life might have been like for these animals.

MS/HS Extension: Using evidence provided in the exhibit, explain why *Cryolophosaurus* was depicted with these facial colorations.

Section 5 | From Lush to Barren: A Transformed Antarctica

Highlight Piece: *Taniwhasaurus* (Marine Reptile)

Where do you think *Taniwhasaurus* lived and what do you think it ate? What do you see that makes you say that?

MS/HS Extension: How is *Taniwhasaurus* different or similar to animals in Antarctica now? What does that tell us about how Antarctica has changed and/or stayed the same?

Section 6 | Lessons from Antarctica

What new questions have arisen for your students as you've explored these expeditions?

MS/HS Extension: What field of study would you use to answer these questions? If you were a scientist studying in Antarctica today, what questions would you want to ask?

Antarctic Dinosaurs was developed by the Field Museum, Chicago in partnership with the Natural History Museum of Los Angeles County, Discovery Place – Charlotte, NC, and the Natural History Museum of Utah. Generous support was provided by the Kenneth C. Griffin Charitable Fund. **Expedition Photo 2 by Eva Koppelhus.**