

Teach deep time, stratigraphy and ecosystem change over time with Smithsonian collections

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Background Information

- **Purpose:** This presentation provides key audiences an early opportunity to review a draft prototype using Smithsonian collections to learn science concepts related to paleontology and geology. Our hypothesis in creating these modules is that using museum collections in a realistic scenario with the appropriate scaffolding, tools and feedback will engage and aid students in learning challenging science concepts.
- **Target Audience:** The primary target audience is students in middle school earth science or biology classes. A secondary audience is high school geology or biology students.
- **Functionality:** The modules presented are paper prototypes with no functionality. There are several screens that show the effect of proposed actions (dragging objects, typing text, or drawing images) but these functions are not available in this version of the prototypes.
- **Content and science concepts:** The science concepts presented are fundamental to understanding geology and paleontology. They include stratigraphy, deep time and ecosystem change over time.

Module #1: It's a Date

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[module.](#)



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TO YOUR FIELD BOOK

It's a Date!

How old is this fossil?



Not even paleontologists can tell how old a fossil is just by looking at it. In this activity, you'll discover how paleontologists use STRATIGRAPHY, RELATIVE DATING, and ABSOLUTE DATING to learn about the fossils they find in the field.

BEGIN

Module #2: What Happened Here?

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What Happened Here?

Paleontologists have collected fossils from two sites. The samples are similar, but there are key differences between them.

What could have caused these differences?

BEGIN

Module #3: Trait Tracker

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Trait Tracker

How well do you know your body? How long did it take evolution to put together the pieces that would eventually be you?

Some of our traits evolved a long time ago, but some are relatively recent. Which are which? Time to find out using the TRAIT TRACKER!

BEGIN