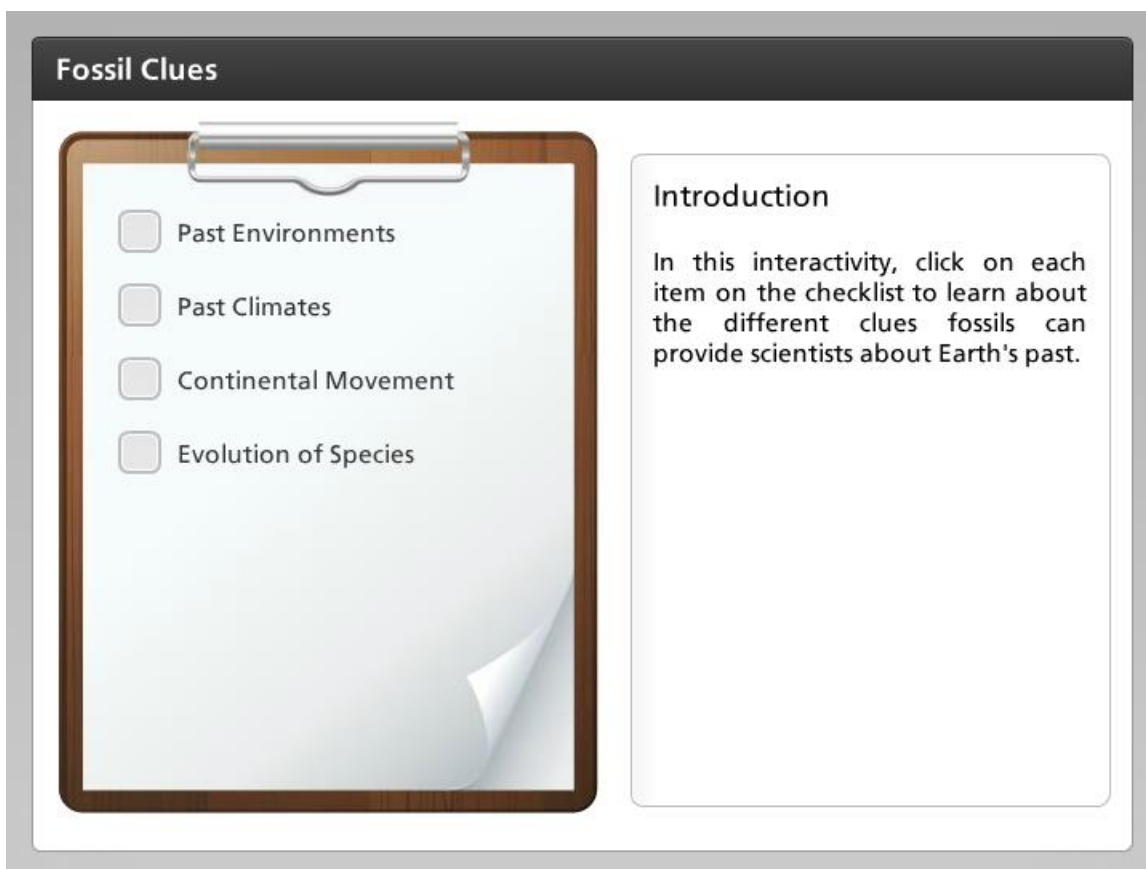


## Module 9: Earth's History

### Topic 4 Content: Fossil Clues Notes

#### Introduction



**Fossil Clues**

- Past Environments
- Past Climates
- Continental Movement
- Evolution of Species

**Introduction**

In this interactivity, click on each item on the checklist to learn about the different clues fossils can provide scientists about Earth's past.


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## Module 9: Earth's History

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#### Past Environments

#### Fossil Clues



- Past Environments
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#### Introduction

In this interactivity, click on each item on the checklist to learn about the different clues fossils can provide scientists about Earth's past.

Today's paleontologists compare fossilized organisms to current organisms and determine what kind of environment in which they most likely lived. Trace fossils help paleontologists to understand what types of food the organism ate, and where the organism lived. For example, current marine organisms that live in shells reside in shallow, warm water environments. Scientists can assume that similar fossilized marine organisms also lived in shallow, warm water environments.

# Module 9: Earth's History

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### Past Climates

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#### Past Climates

When geologists discovered fern imprints in the rocks of Antarctica, they knew that the climate was once very different on this continent. The fossil of the fern is shown in the image. Similarly, glacial tracks found on the continents of Africa, South America, and Australia tell geologists that these continents were once much, much colder than they are today.



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# Module 9: Earth's History

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### Continental Movement

#### Fossil Clues

- Past Environments
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#### Continental Movement

Alfred Wegner and his team used fossil evidence to support the theory of Continental Drift. Wegner identified fossils of the same species on either side of the Atlantic Ocean. The existence of identical species led Wegener to theorize that South America and Africa were once connected.



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### Evolution of Species

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#### Evolution of Species

As geologists dig deeper and deeper into beds of rock, they uncover older and older species. Scientists have been able to organize fossils in chronological order to show a progression of organisms present on Earth. This progression shows that life on Earth has steadily become more and more complex with time.



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### Fossil Clues

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#### Index Fossils

The easiest way to correlate rock layers is to find similar fossils in matching rock layers. This method is similar to the discoveries of Alfred Wegener during his study of Pangaea. The best types of fossils to use for correlation are called index fossils. Index fossils are fossils of an organism that was widespread geographically and only lived for a short period of time.



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