
Scientist: Zeep

Date: _____ - _____ - _____ HR: _____

Fossil Notes

Learning Target 1: Scientists use evidence from rock layers to describe Earth's 4.6 billion-year-old history.

Success Criteria b: Explain how rock layers and the fossils found within them are used to establish relative ages of major events in Earth's history.

The Big Idea:

Fossils and rocks record evidence of past events.

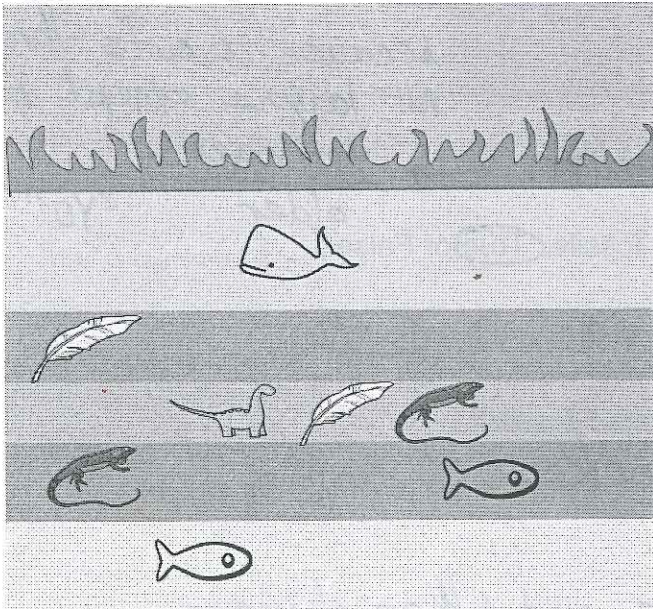
A fossil is the naturally preserved remains or traces of animals or plants that lived in the geologic past.

relative dating:
Determining whether an object or event is older or younger than other events.






Law of superposition:
Younger rocks form over older rocks

Younger "YO"
Older

Directions: Use the diagram and the key to answer the following questions.



Key

-  Reptile
-  Bird
-  Dinosaur
-  Whale
-  Fish

- Fossils are the same age as the rock layer they are formed in.

1. Which fossil is the oldest? fish
2. Which fossil is the youngest? whale
3. Which animal has been around longer, birds or reptiles? reptiles
4. There is grass growing on top of the layers, but the fossils of sea life below. How is this possible? The area was once a sea (in the past), but is now land.

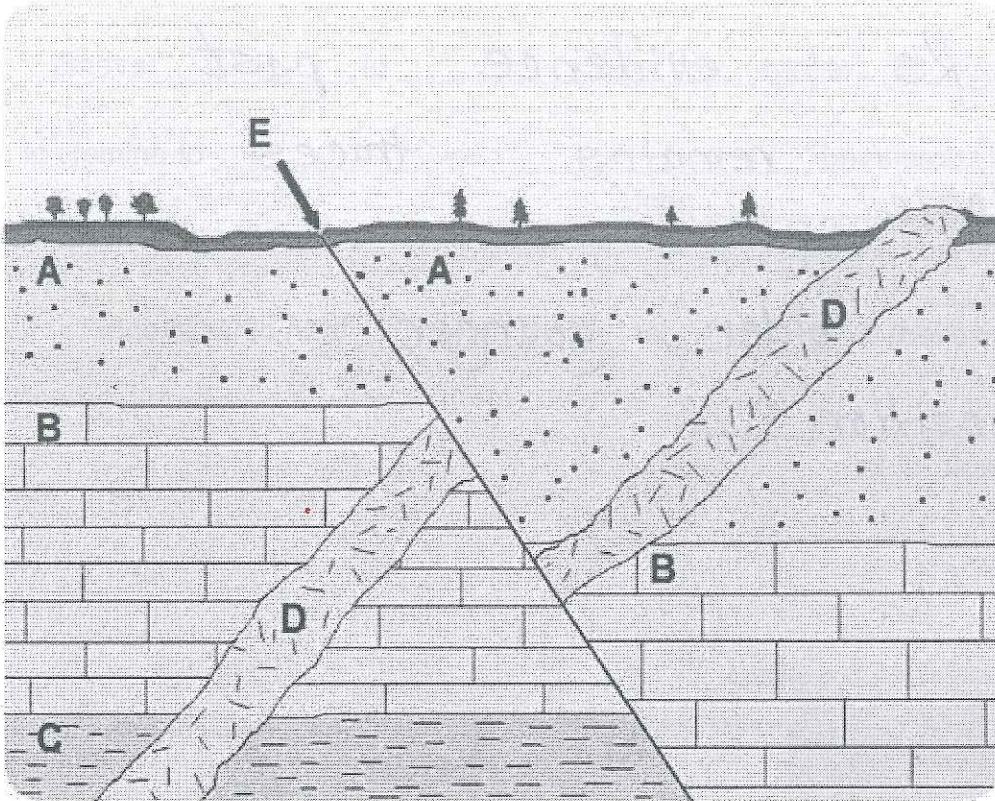
Disturbances in Rock Layers:

Disturbances are always younger than the rock layers they cut through. Faults and intrusions are two types of disturbances.

An intrusion is the movement of magma from within the earth's crust into spaces in the overlying layers to form igneous rock.

A fault is a fracture or zone of fractures between two blocks of rock.

The Order of Rock Layers:



Determine the order of rock layers from youngest to oldest.

E
D
A
B
C

Make sure you give your reasoning.

E is the youngest because it cuts through all layers.

D is the 2nd youngest because it cuts through all layers except E.

Questions:

$\begin{matrix} A \\ B \\ C \end{matrix} \}$ law of superposition \rightarrow younger
older "YO"

1. Sedimentary rocks are the only rocks that contain fossils. True or False

2. When looking at a rock layer, the oldest sample is at the.... top or bottom?

3. Why are sedimentary rocks the only rocks that contain fossils?

Heat creates the other rocks.

4. What can scientists learn from rock samples?

Life, climate, geologic events, and other changes.

5. If you tell someone you are 11 years old, you are giving them your.... relative or absolute age?