
What Do Rocks Tell Us About Earth's History?
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First, we will look at examples of types of sedimentary rocks.

Second, we will look at examples of fossils.

TYPES OF ROCKS

IGNEOUS

Granite

Scoria

Pumice

Obsidian

SEDIMENTARY

Sandstone

Limestone

Shale

Conglomerate

Gypsum

METAMORPHIC

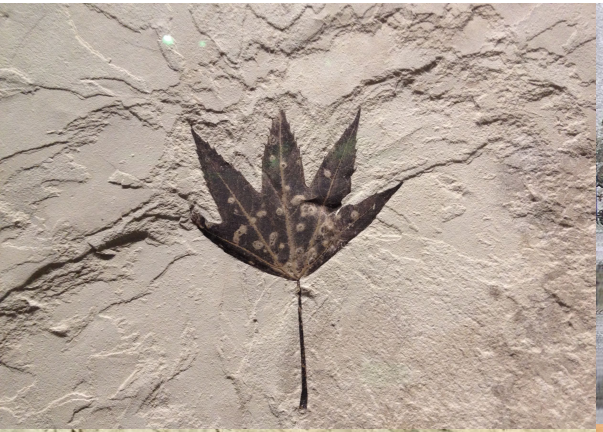
Marble

Slate

Quartzite

Gneiss

Types of Fossils







Could there be a connection between rocks and fossils?

YES

We use Index Fossils to tell us about the past!

Think about Index Fossils as a bookmark in rocks layers.

Index Fossils tell us where in time we are.

We use rock layers to tell us how old the index fossil is.

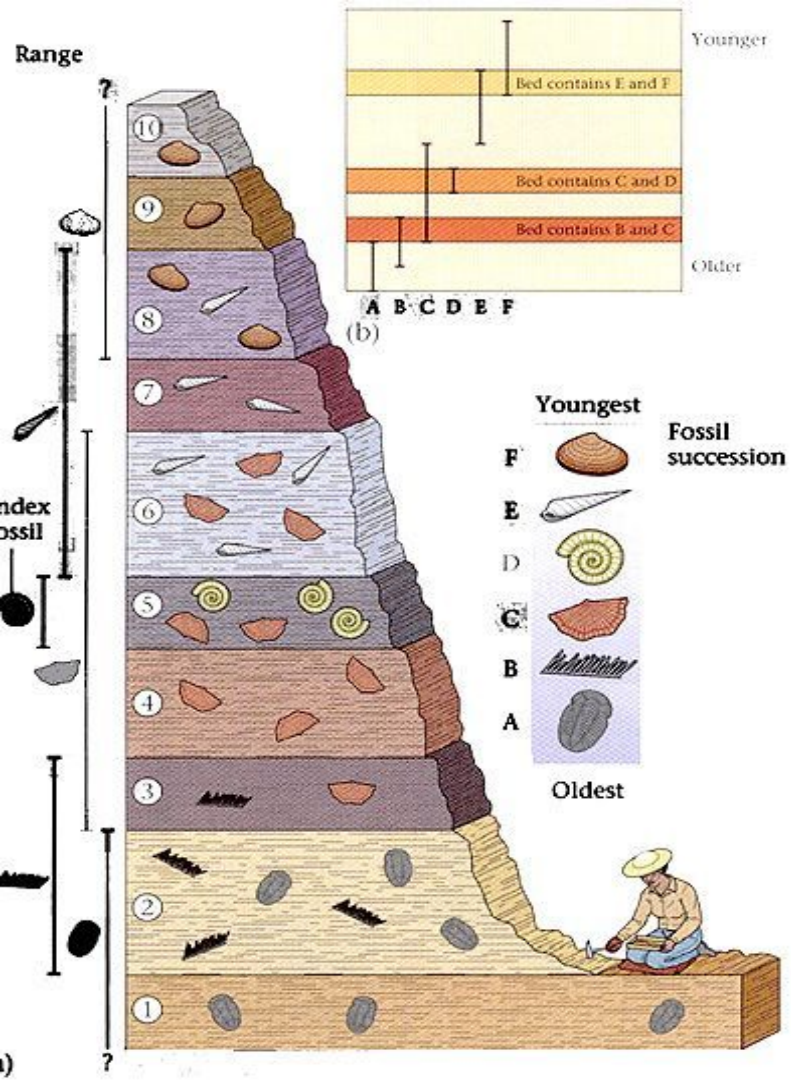
What makes an Index Fossil?

For something to be an index fossil it has to meet 3 things

1. Widespread- meaning we can find this fossil across the rock layer.

1. Abundant- meaning there are many fossils of that kind.

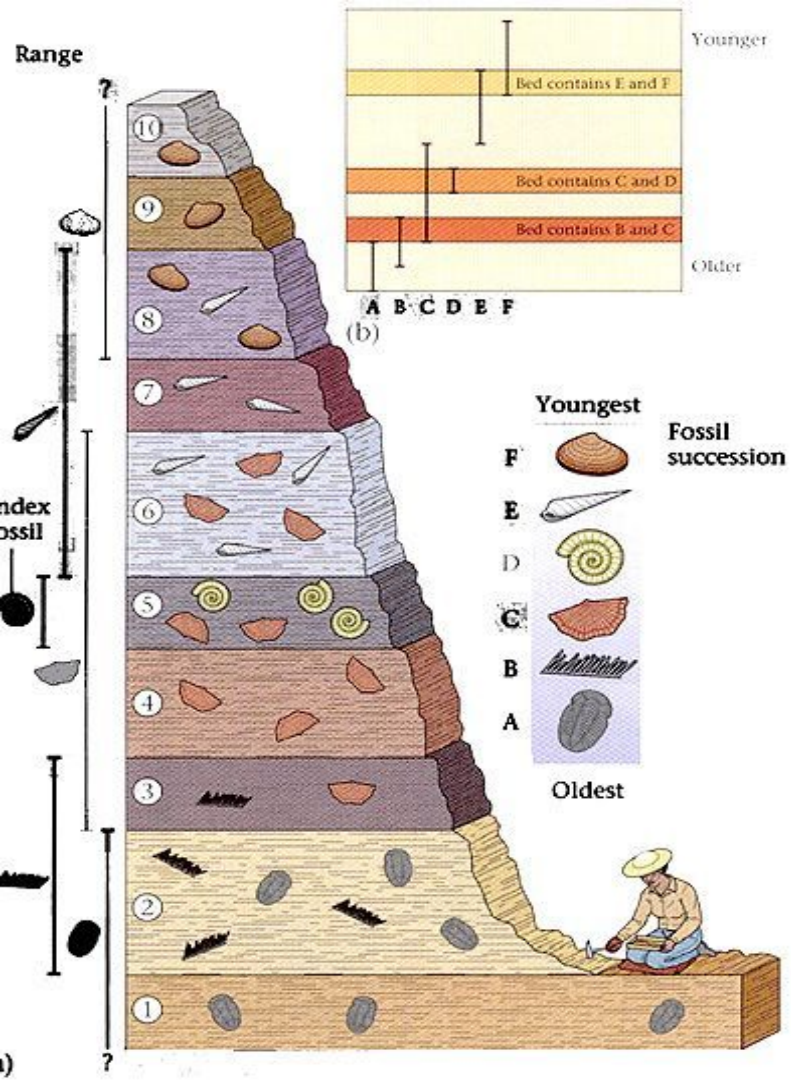
1. Short-lived- meaning we can only find that fossil in on rock layer



How to use rocks layers?

The closer the fossils are to the top layer the younger they are.

The closer the fossils are to the bottom layer the older they are.



For example in this image fossil **D** (the yellow fossil) is an Index Fossil.

Why?

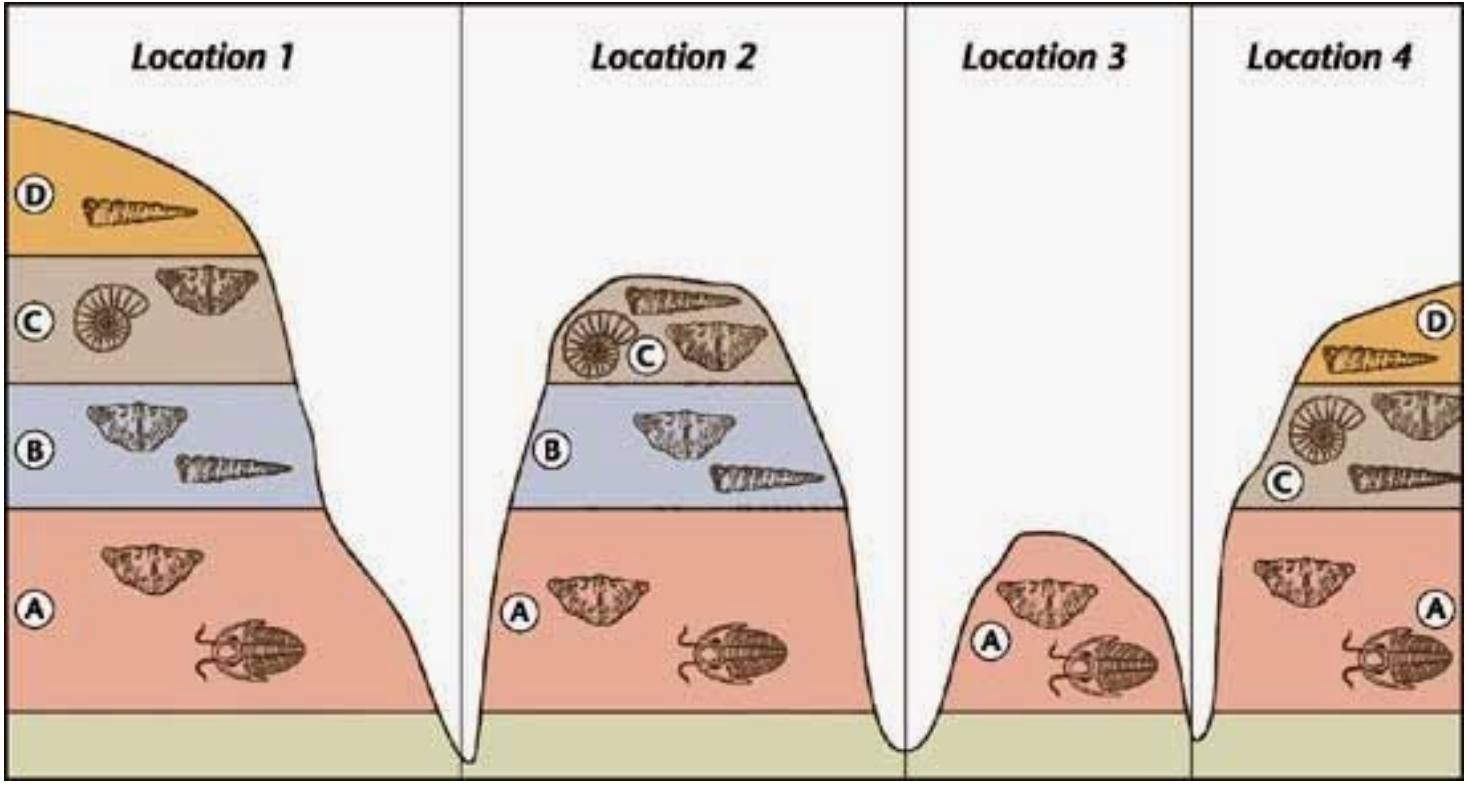
1. It is **WIDESPREAD**

1. It is **ABUNDANT**

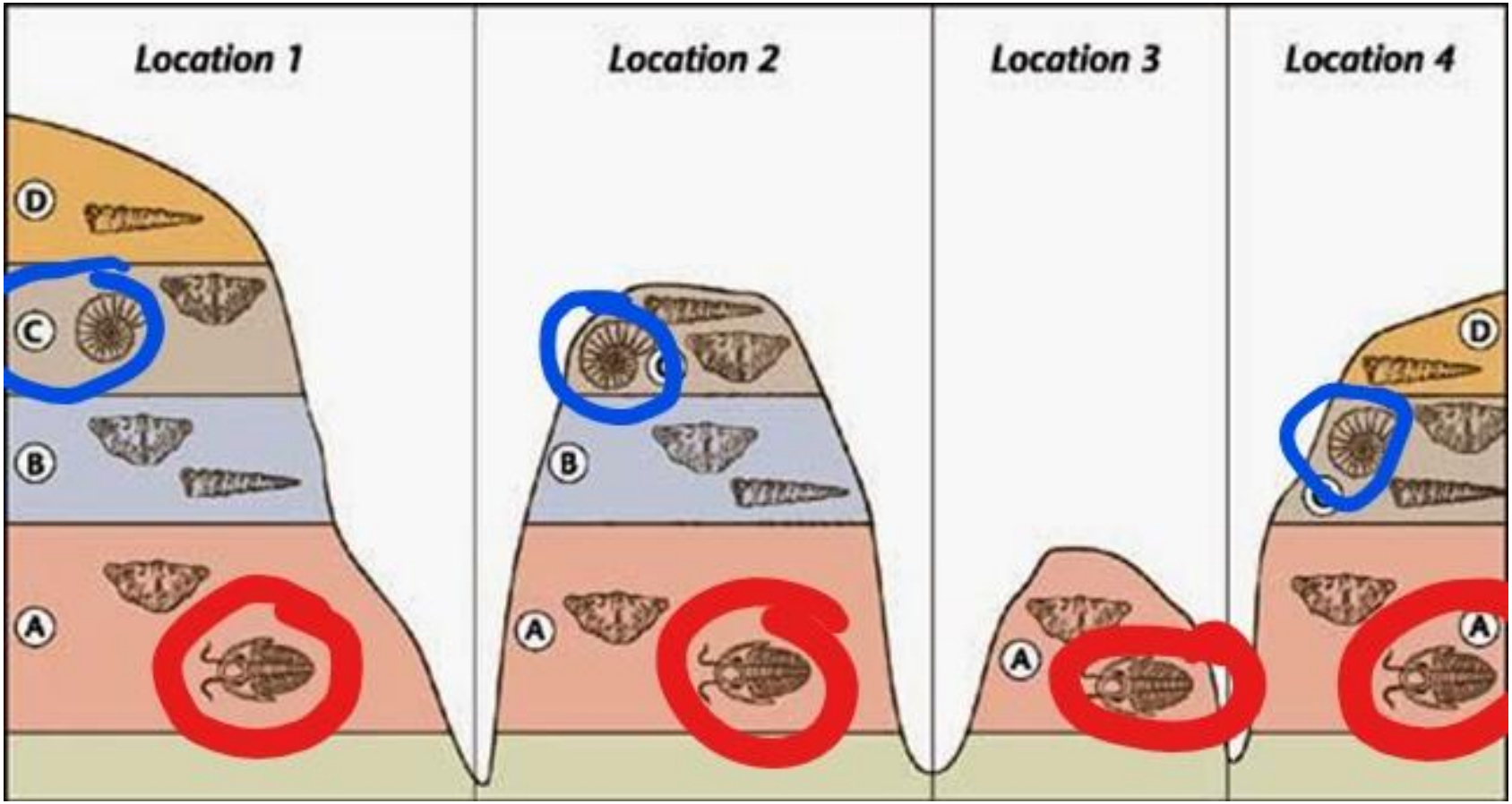
1. It is only found in **ONE rock layer**

Now you try!

Which fossils are Index Fossils?



The next slide will show the answer. Do not go farther than this slide if you do not have an answer or guess.


Location 1
Location 2
Location 3
Location 4
D
C
B
A
D
C
B
A
A
D
C
A

Awesome job! Now you know how fossils and rock layers work together so, we can identify which organism lived at which point in the past. As well as what makes a fossil and index fossil!

Here is an extra fun activity about ordering layers of rock using the clues from fossils!

https://www.amnh.org/explore/ology/paleontology/layers-of-time2