

Define:

Absolute dating

Relative dating

Uniformitarianism

Principle of superposition

Unconformities

Fossils

Radioactive Decay

Half-life

Feb 24-3:57 PM

Write the question and answer on looseleaf:

- 1. What is the difference between absolute dating and relative dating?**
- 2. Why does the principle of superposition help us to know the ages of rocks?**
- 3. How can erosion affect the geologic rock record?**
- 4. What is correlation... and how does it help us know the ages of rocks?**
- 5. How does absolute dating help us to know how old a rock is??**
- 6. What radioactive isotopes are helpful for finding the ages of igneous rocks?**

Feb 24-4:00 PM

Define:**Absolute dating**

Process of assigning a precise numerical age to an organism, object, or event

Relative dating

Process of placing object or events in their proper sequence in time.

Principle of superposition

Oldest rocks in an undisturbed sequence of rock layers are at the bottom of the sequence

Unconformities

Gaps in rock record where erosion occurred

Fossils

Remains or traces of organisms found in geologic rock record.

Radioactive Decay

Decay of a unstable radioactive element into stable element

Half-life

Amount of time it takes for half of a radioactive element to decay

Feb 24-3:57 PM

Write the question and answer on looseleaf:

1. What is the difference between absolute dating and relative dating?

Absolute dating gives an accurate age to the rock, while relative dating gives the age *relative to other layers of rock*.

2. Why does the principle of superposition help us to know the ages of rocks?

The deepest layer of undisturbed sedimentary rock was deposited first, so the ages of rocks in that layer are oldest.

3. How can erosion affect the geologic rock record?

If a layer of rock is eroded away, then there is a gap in the rock record.

4. What is correlation... and how does it help us know the ages of rocks?

Fossils that lived for a short time may be present in rock layers of different areas. The correlation of the fossils tells us that the layers were formed around the same time in history.

5. How does absolute dating help us to know how old a rock is??

Absolute dating uses radioactive elements that have a half life. They decay at a certain rate and we can observe how much of the elements in the rock are decayed, and know the age of the rock.

6. What radioactive isotopes are helpful for finding the ages of igneous rocks?

Uranium, Thorium

Feb 24-4:00 PM

Geologic time 5 min Relative Dating... good 1st one
<https://www.youtube.com/watch?v=pk4l-vmJiYc>

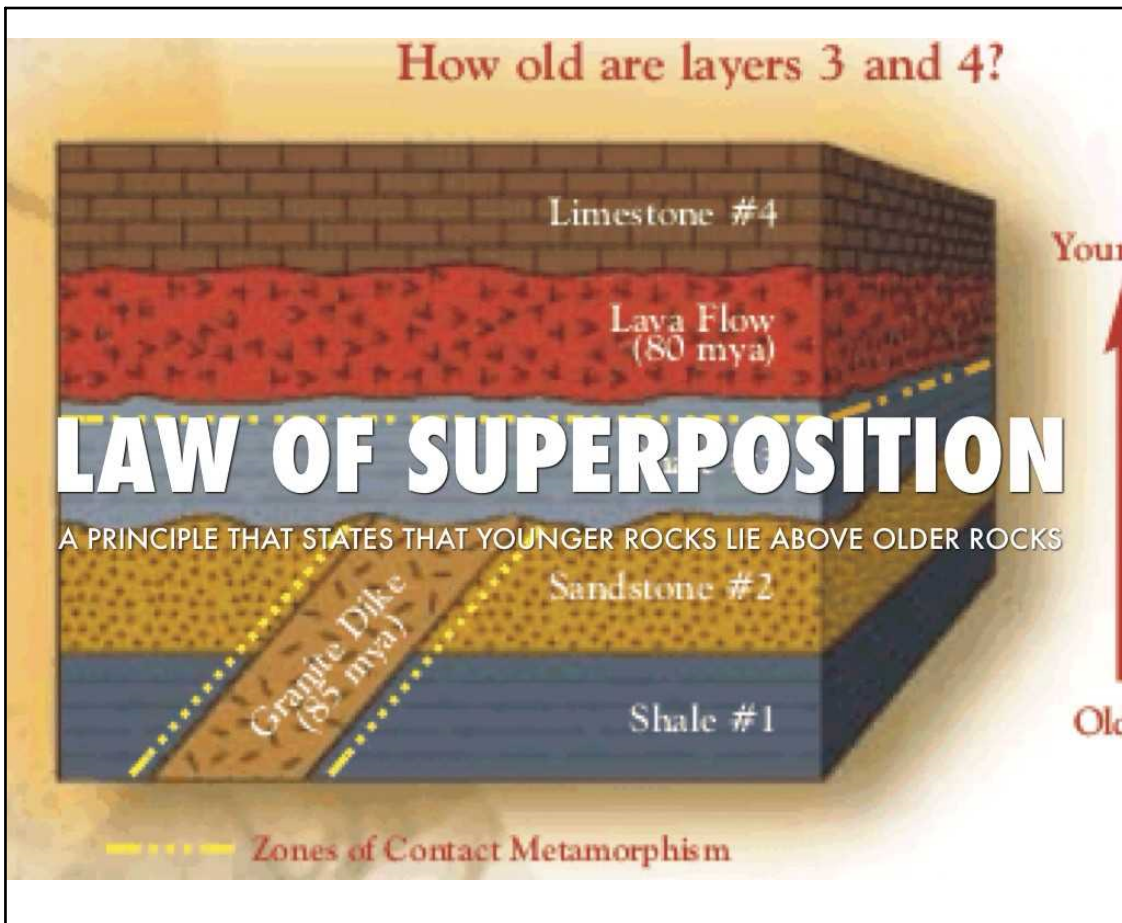
Brain pop: Geologic Time Strata 3.5 min
<https://www.brainpop.com/science/earthssystem/geologictime/>

Brain pop: Carbon 14 dating 3 min
<https://www.brainpop.com/technology/scienceandindustry/carbondating/>

Radiometric Dating 5 min good 2nd one
<https://www.youtube.com/watch?v=AepDyWBStqo>

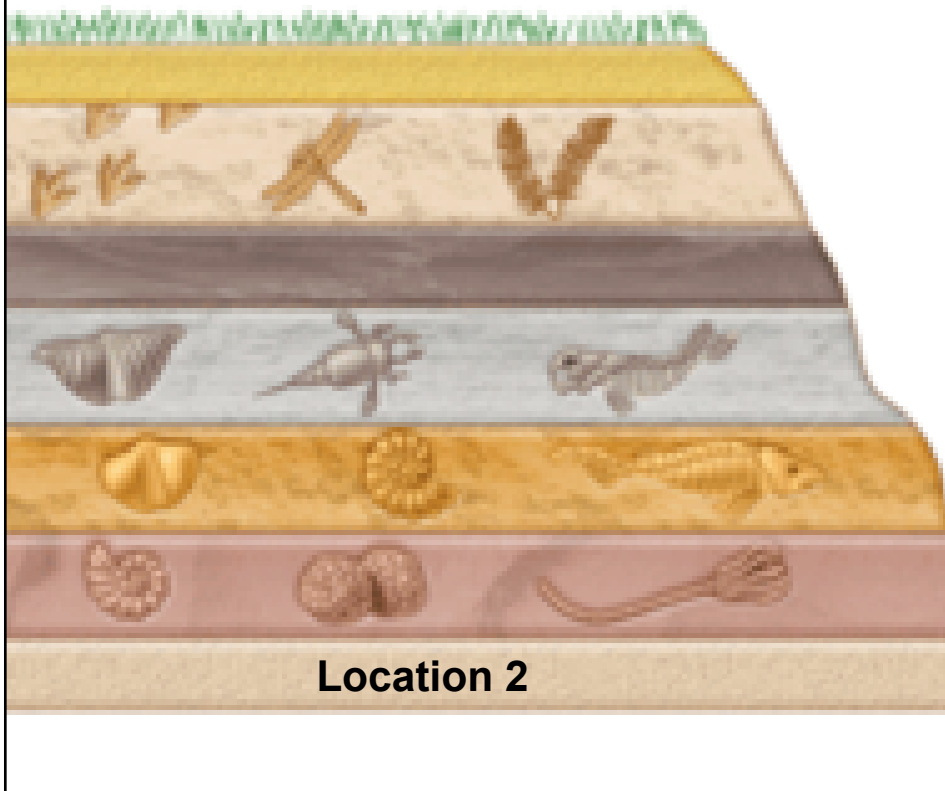
Radiometric Dating 7 min
<https://www.youtube.com/watch?v=1920gi3swe4>

Feb 26-2:59 PM



Feb 24-4:16 PM

And if similar fossils are found in rock layers that formed at different locations, we can INFER that....



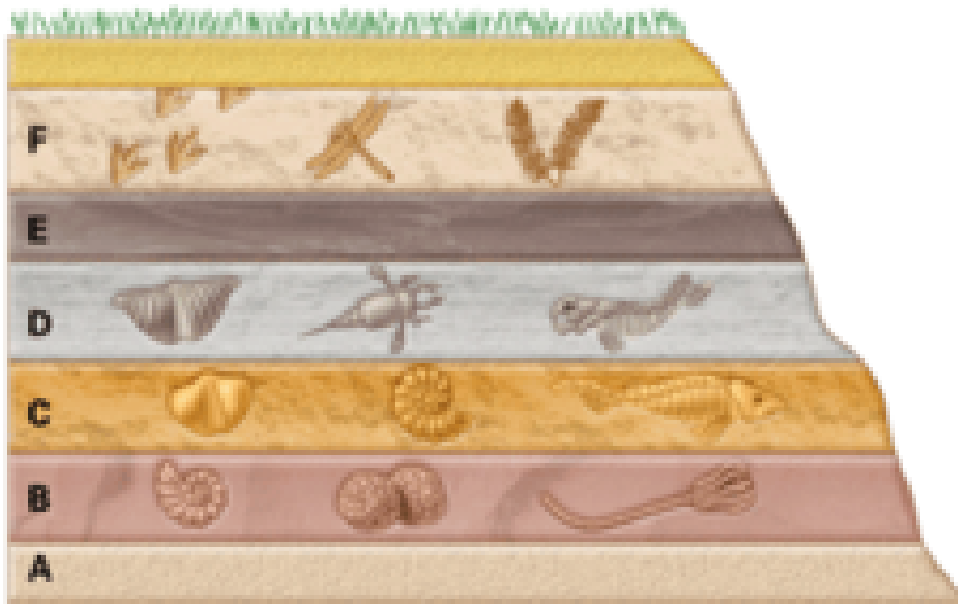
Feb 27-4:21 PM

Ending clip 5 min: When Dinosaurs Roamed America
<https://www.youtube.com/watch?v=9v0maaOR84U>



Mar 2-1:29 PM

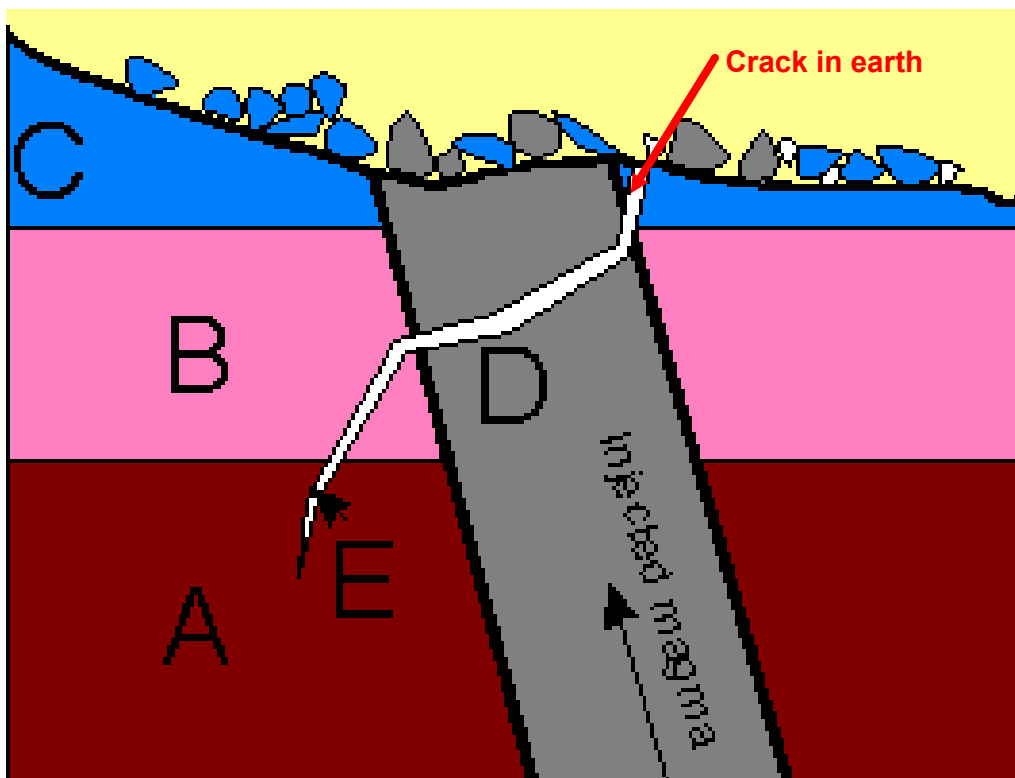
The Principle of Superposition



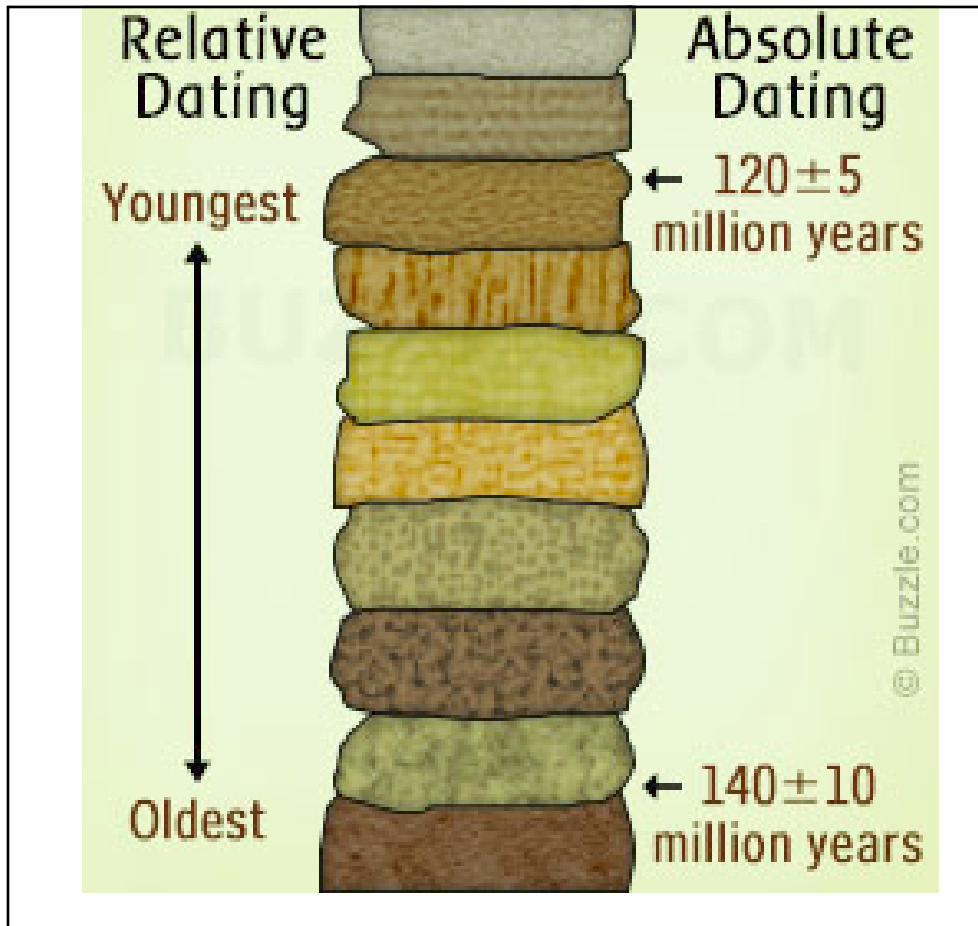
Location 1

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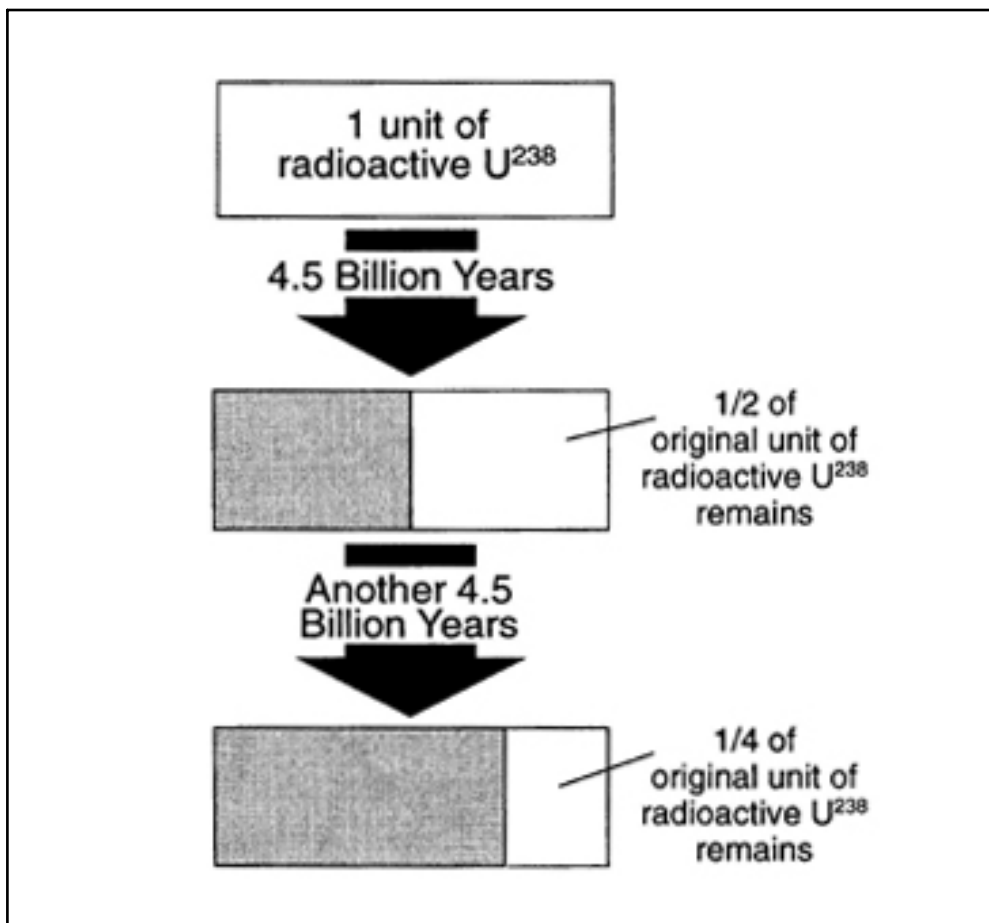
What's the Order of Events?



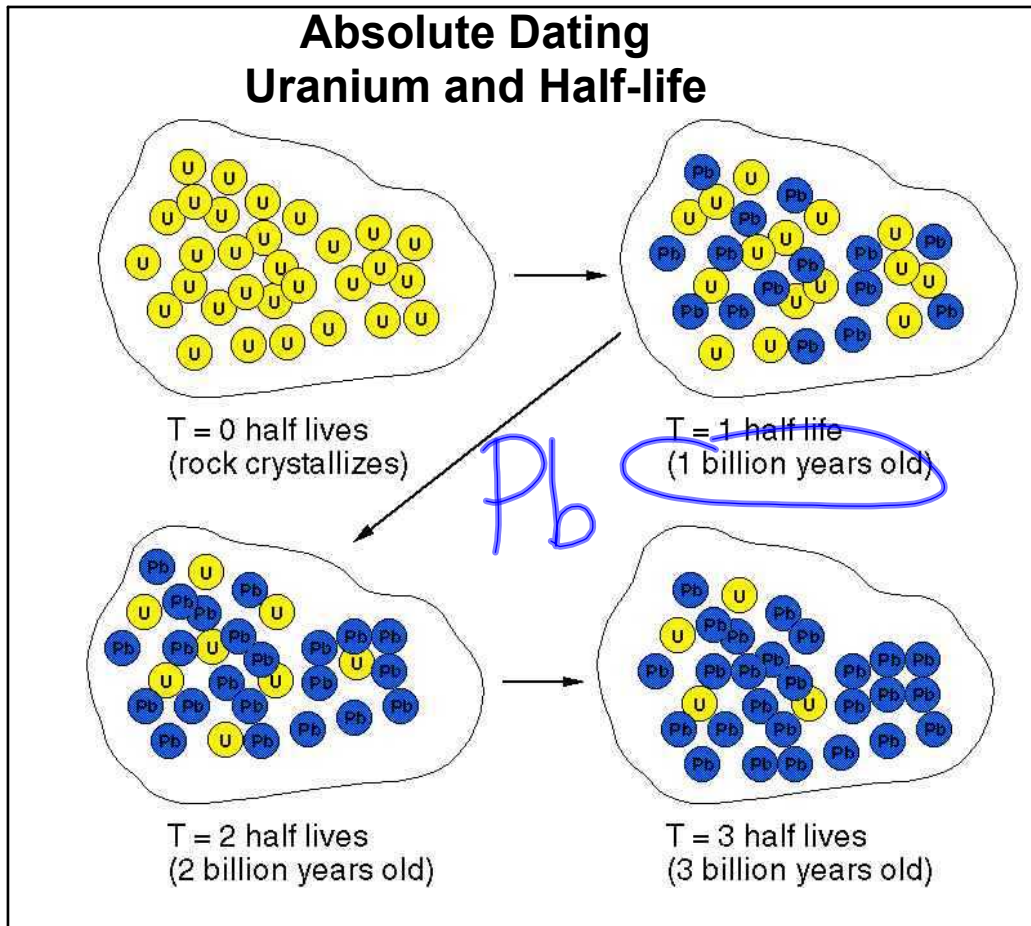
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Feb 24-4:12 PM



Feb 24-4:11 PM



Feb 24-4:07 PM