

# Relative Dating

Jigsaw Activity

# Questions

1. How old did humans think the Earth was prior to 1800? How did they obtain this value?
2. Explain James Hutton's Principle of Uniformitarianism?
3. Lord Kelvin was an extremely influential scientist in the mid 1800's- what was his calculated age of the Earth? How was he proven wrong?
4. List the 6 Relative Dating Principles.
5. What is an unconformity? How did unconformity provide Hutton with evidence for uniformity?
6. What is the difference between the law of superposition and the law of cross-cutting relationships?

# Relative Dating

- Allows geologists to place events in order.
- Cannot determine the chronological age of the events by way of these methods.
- Geologists use stratigraphic columns to show a sequence of sedimentary rocks, with the oldest rocks on the bottom and the youngest on top.

# Absolute Dating

- Allows scientists, archaeologists, and geologists to determine the chronological age of objects by way of examining physical characteristics

## Examples:

- Written records (dates on coins or other written documents)
- Counting Tree rings
- Counting layers in ice core samples
- Radiometric dating (carbon or uranium dating, luminescence dating methods etc.)