



Relatively Delicious Rock Dating: Teacher Guide

Recommended Post-Video Activities

Option 1: Relative Dating Worksheets

Assess your students' understanding of the geologic laws of superposition and cross-cutting relationships with this worksheet. Students apply these laws to put rock layers and formations in order from oldest to youngest on a picture of the rock layers at Black Canyon and on a second, slightly more challenging, stratigraphic diagram.

Option 2: Using Technology to Explore Outdoors, Absolute Dates Included

Students can also learn about the geologic story where they live. Using geolocating technology, the free app “Rockd” can identify what rock layers are around your current location, complete with information about each layer’s absolute age, associated fossils, and mineral content.

Rockd.org

No smartphone? No problem! The “Rockd Explore” website allows students to search a geologic map of the world. Students can research rock layers anywhere in the world in a variety of research projects.

Rockd.org/explore

Learn More

National Park Service Geologic Resources Division

Check out these National Park Service articles explaining the history and meaning of several important geologic laws, including the ones discussed in our video.

Superposition: nps.gov/articles/geologic-principles-superposition-and-original-horizontality.htm

Cross-cutting Relationships: nps.gov/articles/geologic-principles-cross-cutting-relationships.htm

Radiometric Dating: nps.gov/subjects/geology/radiometric-age-dating.htm

Macrostrat

This is a free, online, worldwide geologic mapping database. Clicking on the map reveals the rock layer in that area as well as information on the physiography – short paragraphs about the regional geologic history, such as how the Rocky Mountains formed.

macrostrat.org