

Geologic Time

Materials:

- Geologic Time Scale
- Map of Nebraska Bedrock Geology
- Web access

Background:

This would make a great introductory lesson to Geologic Time. Students should understand rock formation and weathering. The primary goal of this activity is to have students understand the vastness of geologic time.

Exploration:

1. Have students research, either in the library or on the web, when the following lived on the earth; tyrannosaur, plesiosaur, Neanderthals.
2. Students may give answers in years, or eras, periods and epochs. Have them write up their results.
3. Discuss as a class what the students found out.

Instruction:

1. Place each organism on a geologic time scale so students can see where it fits in to the overall history of the earth.
2. Highlight when life probably began and when humans first appeared on the geologic time scale.
3. Show students the Nebraska bedrock map and explain the different time periods that are present. Use this opportunity to discuss unconformities and explain how they relate to Nebraska's geologic record.

Assess:

Have students work together in groups of two create a geologic time scale that represents the bedrock geology of the state of Nebraska. Have them include the Era, Period, Epoch, Age, time in millions of years, and an example of at least 1 creature alive at the time.

Reteach:

Show students paleogeographic maps for key intervals in Nebraska's history and interpret them for the students. (<http://jan.ucc.nau.edu/~rcb7/>) Explain how the rock layers in Nebraska fit in with what is shown in the paleogeographic maps.