

Utah's Geological History And its Effect on Human Life

Paul Nance--2011

Science

Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface.

Objective 3: Relate the building up and breaking down on Earth's surface over time to the various physical land features.

Indicator: c Use a time line to identify the sequence and time required for building and breaking down of geologic features on Earth.

ILOs 1b Sort and sequence data according to criteria given.

1d Compare things, processes, and events.

1i Use data to construct a reasonable conclusion

5a Cite examples of how science affects life.

Background Information:

Over the past 400 million years, Utah has gone through a lot of changes. It has had oceans covering part of it; winds that have blown sand everywhere; inland seas and large lakes; forces pushing the land up and pulling the land —creating mountains, basin, and plateaus; moderate and harsh climates; weathering and erosion, glaciers, melting of glaciers, and dinosaurs. All of these influences have had a huge impact on what Utah looks like today geographically—both inside and outside the land. These geography changes have given Utah many things that we enjoy today. In fact, it is these things that enticed the Native Americans, trappers, explorers, settlers, miners, religious and ethnic groups to come to Utah because of its beauty and resources.

Materials

- Poster or on-line Pictures of “Utah Geological History”
 - **On-line version of “Utah’ Geographical History**
 - At the website below are the pictures needed to do the Utah Geographical Lesson to see how Utah has changed over the past millions of years.
 - <http://geology.utah.gov/utahgeo/geo/geohistory2.htm>
- Blank Map of Utah
- Crayons and Pencils
- Relief map of Utah

Activity I

Picture Descriptions of Utah Geological Changes over Time

1. Put the students into groups of four and give each group the booklet that has all the pictures of Utah's geologic history from 400 million years ago to the present. Give the group a blank map of Utah and a log.

2. Have the students look at the pictures they are assigned. (You may want to give them one, two, or three pictures.) Have them read the geological description for that time period. For each picture they are to write down the event that happened and the result of the event (cause and effect if you will) in their logs.
3. After they have discovered the result have them write or draw the event on the map where it affected Utah. They can color code each one if they would like.
4. They will continue to do this until they are done writing and drawing about their discoveries of their assigned pictures.

Activity II

Discussion of the Picture Descriptions

1. When the students have finished their description, have each group report about their findings of each picture.
2. Have the students take notes of the event(s) and result(s) of each picture by writing them in their logs.
3. Have the students write or draw on their maps where these events took place.

Activity III

Making a Connection Between the Results and Affects on Human Life

1. Have a discussion about each of the results they see on their map of Utah.
2. Discuss how it has influenced the types of people that came to Utah.
3. Discuss how it has influenced where people have settled in Utah.
4. Discuss how it influences our lives today.
5. Discuss how it helps Utah's economy and growth.