

# TRB 5:2 - Activity 4: Physical Land Features

## Summary

Students will learn that physical land features have developed over time.

## Materials

manila strips of paper (3 " x 24"); one per student  
colored pencils, pens or crayons  
rulers  
8 1/2" x 11" sheet of paper and a pencil

## Additional Resources:

Utah Geologic Posters  
Zion 's Natural History  
S.L.C., UT, 84114

## Background for Teachers

Geologic time is measured in millions of years (MYA.) The acronym MYA is used because the time span is so large. We know the most about recent history because it has left the most evidence of physical land features and changes.

## Intended Learning Outcomes

- 1-Use science process and thinking skills.
- 2-Manifest scientific attitudes and interests.
- 3-Understand science concepts and principles.
- 5-Demonstrate awareness of social and historical aspects of science.

## Instructional Procedures

### Invitation to Learn:

Prepare a timeline of your own life to show to your students. You will need to show 15-20 things that have happened over the course of your life. Begin with your birth (using as accurate as dates as possible) and ending with your current age and date. Show students your timeline, and tell them some of the highlights of your life. Explain that many of the items on your timeline have occurred in the recent past, when memory is more clear and vivid.

### Instructional Procedures:

Give students an 8 1/2 " x 11 " sheet of paper and have them list 9--10 events that have occurred in their lives, including their birth as the first item. Ask them to give a date of each occurrence to the best of their knowledge (e.g., born Aug.12th, 1992; broke arm Feb.14th, 1999;went to Disneyland June 1st, 2002,etc.)

Hand out a 3 " x 24 " timeline strip to each of your students. Using a ruler have them divide the timeline into 2 " segments with each segment representing one of the events they identified on their rough drafts. Then have the students fill in the events along with the corresponding years. Have them bullet each year with a different color. Remind them they will not necessarily have one item per year and that many events may have occurred more recently.

Have the timeline begin with their births and end with them being in your 5th grade classroom. It is important they understand there does not need to be one event per year of their lives.

Hopefully they will have more events concentrated in the recent past.

Have them date each experience to the best of their memories and draw descriptions at the top of their papers.

Explain to the students the life of Earth can be illustrated on a timeline also, and is often measured using the term MYA (million years ago).

Give a few examples of geologic timeline events in Utah:

Utah under warm seas: 1000 MYA.

Uplift of Uinta Mountains: 65 MYA.

Earthquakes, glaciers, Lake Bonneville, water erosion: 15 MYA.

Take the students on a Chronology Field Trip by showing them slides of various geological features that have developed throughout Utah over time.

Ice

U-shaped valleys found in Northern Utah

Weathering & Erosion

Arches in Arches National Park

Grand Canyon

Stalactites and Stalagmites in Timpanogos Cave

Terraces formed by Lake Bonneville

Sand Dunes

Thistle mudslide

Earthquakes

Unita Mountains

Mountains in Northern and Central Utah

Volcanoes

Southern Utah

Topaz Mountain

Uplift

Colorado Plateau (Canyon Country in the southeast portion of the state)

Be sure to discuss the appropriate dating of these geologic features, and whether the formation was sudden or took place over time.

### Extensions

Genealogy charts or family history records are also ways to connect to the past for information regarding health, origin of family names, etc.

Literature

### Assessment Plan

Make a list of famous landforms both in the United States (i.e., Adirondack Mountains, Black Hills, Cape Cod, etc.) and around the world (Alps or the Matterhorn in Europe, Azores in the North Atlantic Ocean, Mount Vesuvius in Italy, etc.). Copy this list onto separate slips of paper.

Have each student choose one.

Have each student research his/her landform and write a short paragraph about what it is, how it formed, and why it is unique.

Then have each student draw a picture to illustrate the information.

The pictures and information could be displayed as a border around a map of the world.

Use thumbtacks and string to pinpoint exact locations.

### Bibliography

This lesson is part of the Fifth Grade Science Teacher Resource Book (TRB3)

<http://www.usoe.org/curr/science/core/5th/TRB5/>. The TRB3 is designed to be your textbook in teaching science curriculum to your students. This book covers all the objectives of each standard and benchmark. If taught efficiently, a student should do well on the End-of-Level (CRT) tests. The

TRB3 is designed for teachers who know very little about science, as well as for teachers who have a broad understanding of science.

#### Authors

[Utah LessonPlans](#)