



4th Grade Science News

Soils, Rocks, & Landforms Big Ideas for Investigation 3:

1. Earth's surface is continually changing; sometimes those changes happen rapidly and sometimes those changes happen over a long period of time. Earth materials form natural structures called **landforms**.
2. A topographic map uses **contour lines** to show the shape of the surface of the land, and its elevation.
3. Mountains, canyons and cliffs are just a few of the features that a topographic map can show.
4. Contour lines represent a specific **elevation**, usually as feet above sea level.
5. The closer the contour lines are on a map, the steeper the slope of the land.
6. The distance in feet from one contour line to the next is called the **contour interval**.
7. A **profile** displays a cross section of a landform, usually as an outline.
8. **Catastrophic** events, such as volcanic eruptions, can change the Earth's surface quickly and affect thousands of people.
9. **Magma** is the molten rock inside a volcano, while **lava** is the material that flows on the outside of a volcano.
10. Scientists and engineers work on ways to reduce the impacts of natural disasters on humans.

Vocabulary:

New:

- * **elevation**
- * **sea level**
- * **topography**
- * **contour lines**
- * **contour interval**

Recent:

- **deposition**
- **erosion**
- **mountain**
- **slope**
- **valley**
- **model**
- **landform**

This unit will go quickly. This week we are learning how to look at and understand a USGS topographical map, as well as how to draw a profile from a contour map.