

Name: _____

Where is the Best Place to Locate a Geothermal Power Plant? Field Guide

Geothermal energy comes from heat stored within the Earth. In this activity, you will use Google Earth to explore where the Earth is hot. You will

1. Explore two volcanoes.
2. Explore features in “hot Earth” areas in Iceland and in the United States explore Yellowstone, Wyoming and the Cascade Range in Oregon and Washington states.
3. Determine where to locate a geothermal power plant in the Northwest US.

Read **all** instructions on your handout and answer **each** question.

Features in Hot Earth Areas Data Chart

Name of Feature	Description of Feature and Surrounding Area (for example, cone-shaped, faults/crevices/cracks/cavities, lava flow, ice/snow, crater, water flow)
Askja	
Hofsjökull	
Blue Lagoon Area	
Reykjanes Area	
Shoshone Lava Field	
Craters of the Moon	
Yellowstone	
Rainier	
Mount Saint Helens	
Crater Lake	

1. Which metropolitan areas (areas with cities and suburbs) are **close to** hot Earth area features?
2. Which metropolitan areas are **farthest from** hot Earth area features?
3. Near which city would be the **best place** to locate a **geothermal power plant** in the northwest United States?

4. Why did you select that location? Support your decision with evidence from the Google Earth display.

Use your **Features in Hot Earth Areas Data Chart** on page 1 to answer questions 5 and 6.

5. What visible features can you observe in places where the Earth is hot?
Helpful hint: Zoom in closely to explore each feature.
6. Does the **area surrounding** different hotspot features look similar or different?
7. Why are there no geothermal power plants in Pennsylvania?
8. Where is the **best location** for building a geothermal power plant? What features would that area likely have?