

Natural Disasters WebQuest

Part I – Volcanoes!

Instructions:

- Go to the website:
<http://environment.nationalgeographic.com/environment/natural-disasters/forces-of-nature.html>
 - Click on the *Volcano* icon.
 - Read the information on the side and click through the tabs **1 – 6** to answer the following questions:
1. Where do most volcanoes occur?
 2. What type of volcanoes occur at spreading centers?
 3. What volcanoes occur at subduction zones?
 4. Which type of volcano is encircled by steep cliffs and often filled with lakes?
 5. What is viscosity?
 6. True or False: High viscosity volcanoes erupt more explosively than low viscosity volcanoes?
 7. In the Make Your Own Volcano activity, which combination of silica content and dissolved gases erupts violently like Mt. St. Helens? Which combination erupts gently like the shield volcanoes in Hawaii?

Click on the *Case Studies* tab at the upper right. Read through the case studies to answer the following questions.

8. When did Mt. Kalauea's current eruption begin?
9. What volcano caused tsunamis in Indonesia over a hundred years ago?
10. Click on number "6" under the *Case Studies* section. Look at the pictures of Mt. Vesuvius and Pompeii. Do you think that the current residents of Naples, Italy, should be concerned for their safety?

Natural Disasters WebQuest

Part II - Earthquakes!

Instructions:

- Go to the website:
<http://environment.nationalgeographic.com/environment/natural-disasters/forces-of-nature.html>
 - Click on the *Earthquake* icon.
 - Read the information on the side and click through the tabs 1 - 6 to answer the following questions:
1. Where did an intraplate earthquake occur in the 1800's?
 2. How deep is the San Andreas Fault?
 3. Look at the animation of the different fault types. Which type is found in the Himalayan Mountain region? Which type is found in Turkey?
 4. Watch the animation of earthquake waves. What are the three types of waves? What do seismologists study?

5. Click on number “6” *Locate an Earthquake*. Follow the instructions on screen. Where was the earthquake located?

6. Click on number 7 “*Trigger an Earthquake*”. Select Bedrock and Low Magnitude. Describe what happens to the building. Next, select landfill and High Magnitude, and describe what happens to the building. Finally, select Fault Line and High Magnitude, and describe what happens to the building.