

Earthquakes

Name: _____ Class: _____



What are Earthquakes?

Briefly summarize the information on this web page using the topics in the table below.

Topic	Summary of Information
definition of earthquake	
causes	
occurrence	
number of earthquakes yearly	
measurement	

Earthquakes

Name: _____ Class: _____



What Causes Earthquakes?

Earthquakes are great shakings of the ground beneath our feet. What possibility cause so much of the earth to shake so easily? Find out by completing this activity.

After reading this Web page complete the close passage below to learn the causes of earthquakes.

The Causes of Earthquakes

The earth is divided into _____ main _____. The _____ layer, called the _____ is broken into large irregular _____ called _____. These move very _____. The plates are driven by energy _____ deep within the _____. It is this _____ that has shaped the physical features of the _____ - such as _____, valleys, _____ and plateaus. _____ occur when these moving plates _____ and _____ against each other.

Word Bank

plains pieces three outer crust movement
scrape plates forces/earth slowly features
mountains layers grind earthquakes

Earthquakes



Name: _____ Class: _____

Where Do Earthquakes Occur?

While it is true that earthquakes can occur anywhere at anytime, certain areas of the earth are more likely to have earthquakes than others. Where are these areas? Are they close to where you live? Find out by completing this activity.

This web page shows two maps of the world centered over the Atlantic Ocean. One shows the location of earthquakes from 1994-1999. The second map shows the location of the boundaries of the plates that form the earth's crust. Study both maps and on the lines below, write your observations.

Have there been many earthquakes recorded where you live?

Do you live near one of the boundaries of the plates?

Are earthquakes likely to occur in your area in the future?

Earthquakes

Name: _____ Class: _____



Earthquake Measurement

With all the energy released by an earthquake far below the earth's surface, how do earthquakes get measured? Complete this activity to find out.

1. What do scientists use to measure an earthquake?

2. Write a definition for each of these ways.

3. What is a Richter scale?

4. What is a seismograph?

5. What is the epicenter of an earthquake?

Earthquakes

Name: _____ Class: _____



Seismic Science

Seismic science is the study of the energy released by an earthquake. Complete this activity to learn more about the tools used.

1. What is a seismometer and how does it work.

2. What determines the size of an earthquake?

3. How does the strength of an earthquake change as you go up the Richter scale?

4. How do scientists around the world help each other learn more about earthquakes?

Earthquakes

Name: _____ Class: _____



Seismic Waves

Energy released by an earthquake travels in waves. There are several different types and they cause different effects on the earth's surface. Find out more by completing this activity.

Read the Seismic Waves Web page and use it to complete the table below.

Wave Feature	P-Waves	S-Waves
Speed		
What material they travel through		
Where they travel		
Type of motion created		