

Earthquakes

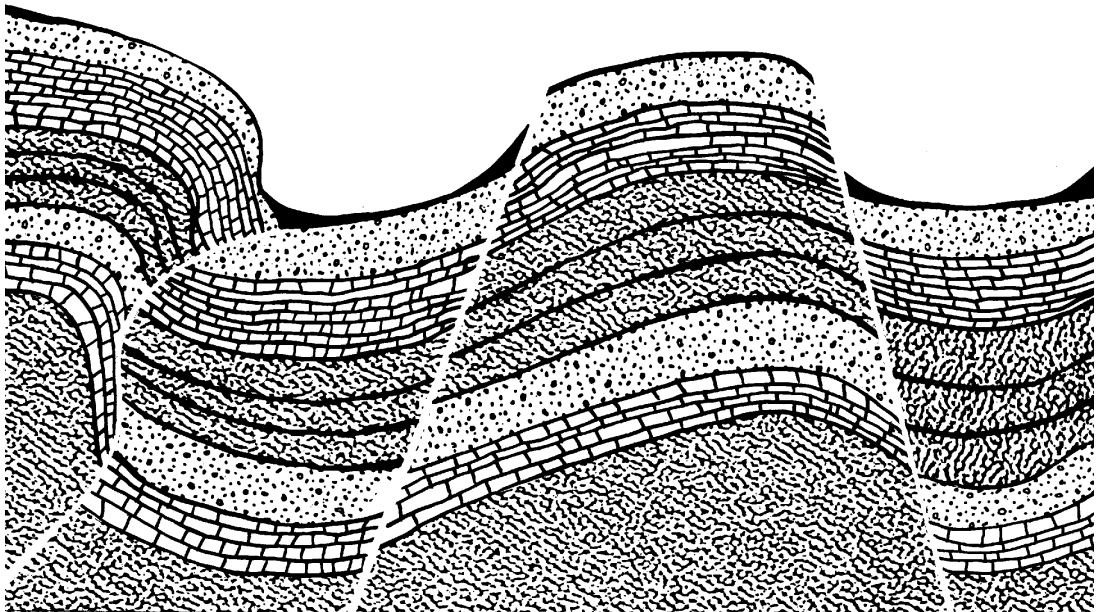
Making the Connection: Earthquake technology has greatly increased society's ability to deal with earthquake disaster and even to predict earthquake possibilities.

Shake, rattle, and roll!

You've just read a good description of an earthquake. An earthquake happens when rock beneath the earth's surface moves or shifts. Stresses in the rock cause it to break and then move along a fault, or crack. Sometimes the shift is sudden and quick; other times it starts slowly and lasts several minutes.

Seismologists are scientists who study faults and earthquakes. They use instruments called seismographs to record the ground's motion. By collecting data from different parts of the world, they can compare movement and magnitude of volcanoes. This data helps them predict where major earthquakes are likely to occur.

Seismologists use other methods to predict earthquakes. Devices that measure acoustic emissions listen for sounds of stress under the earth's surface. Lasers above ground measure the landscape to detect shifts, especially along fault lines. Although there is no way to make exact predictions very far in advance, any warning at all may make it possible for people to evacuate in time.



Name _____ Date _____

Work with a partner or in a small group to design an Earthquake Survival Plan. First, consider the following things, taking some notes on what data you may need to gather and research.

Earthquake Survival Plan

Prevention

Think about building codes your city could enforce.

Think about land use in your city. How can you know where a fault exists?

How can you limit building in fault areas?

Survival

Think about things you can do in your home to make it safer.

Think about supplies you would need to have on hand.

Divide tasks among your group and share your plan with classmates.