



Name \_\_\_\_\_ Date \_\_\_\_\_

## EARTHQUAKES

Have you ever been in an earthquake? How did it feel? An earthquake can be a scary experience. What is an earthquake? An earthquake is really Earth's way of getting rid of stress. The earth has plates that shift back and forth. This stress and strain causes the surface of the earth to crack. It is like pushing against the two ends of a stick. The stick will eventually bend and break from the pressure. The earth's crust reacts the same way. As the plates move, they put pressure on each other. When the force is strong enough, the crust breaks. The stress is released as energy that moves through the earth in the form of waves. These waves are what we call earthquakes.

Did you know that there are different types of earthquakes? They are called tectonic, volcanic, and explosion earthquakes. A tectonic earthquake is the most common. These happen when the rocks on Earth's crust break because of the tectonic plates shifting. A volcanic earthquake takes place during the eruption of a volcano. Explosion earthquakes happen when there has been a chemical or nuclear detonation. These earthquakes take place in underground mines.

Earthquakes can be measured in many ways. One of the ways is to measure how intense an earthquake is. Magnitude is another way to measure an earthquake. The Richter scale is used to measure the magnitude. Seismic measurement is measured by using seismic waves.

### STORY QUESTIONS

1. Why are earthquakes likened to waves?
  - a. Earthquakes begin out in the ocean.
  - b. The waves of the ocean cause the earthquakes.
  - c. The force of energy released when the crust breaks is called a wave.
  - d. Nuclear chemicals form a wave.
2. What is the purpose of the third paragraph?
  - a. to explain how earthquakes are measured
  - b. to explain how earthquakes are formed
  - c. to explain how earthquakes are prevented
  - d. to explain how earthquakes are survived
3. Where would you read to find out about the three types of earthquakes?
  - a. first paragraph
  - b. end of the third paragraph
  - c. second paragraph
  - d. end of the second paragraph