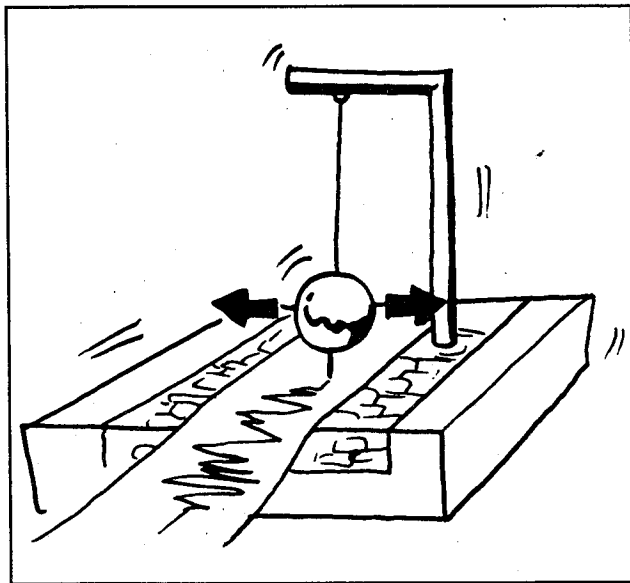


## Earthquake!

### WORD LIST

tsu • na • mi	mag • ni • tude
seis • mo • graph	Rich • ter scale
stress	fault

Earthquakes have always been feared. In 1557, an earthquake killed 830,000 people in China. In 1750, England experienced five strong earthquakes. Five years later a terrible quake and tsunami destroyed Lisbon, Portugal. It was after this that the modern study of earthquakes began.



John Milne developed the seismograph in 1890. It was used to measure ground movements. Also around that time, Grove Gilbert came to an important conclusion. He saw that faults were a major cause of earthquakes. (Before this, many thought that underground explosions caused them.)

After the 1906 San Francisco earthquake, Harry Reid made a discovery. He found that quakes were the result of stress building up in

the earth. After many years, the weak point in the earth (the fault) snaps, causing an earthquake.

Many people know about the earthquakes in Alaska and on the west coast. But there is another area of the U.S. that is prone to earthquakes. It is called the New Madrid Seismic Zone. It includes parts of Arkansas, Missouri, Tennessee, Kentucky, and Illinois.

The most violent earthquakes in the U.S. occurred here during 1811-1812. The area suffered about 2,000 shocks in six months. Five were a magnitude of 8.0 on the Richter scale. Eighteen quakes were strong enough to ring church bells on the east coast 1,000 miles away. People saw the ground moving in waves. Large areas of land rose and fell. Forests and farmland were destroyed. Reelfoot Lake was formed in Tennessee, and the course of the Mississippi River was changed. Fortunately, few people lived there at the time.

Today this area is more populated. That is why people there have joined together to plan and prepare in case another earthquake occurs. They are studying the movements of the earth. They are telling people how to be prepared. They are also working to get stronger buildings, highways, and bridges. This way, if an earthquake does strike, more people will be kept safe.

# Earthquake!

## GETTING THE FACTS

1. What did Grove Gilbert discover about earthquakes? \_\_\_\_\_  
\_\_\_\_\_
2. What did Harry Reid discover about earthquakes? \_\_\_\_\_  
\_\_\_\_\_
3. Where and when did the most violent earthquakes occur in the U.S.?  
\_\_\_\_\_
4. Name two areas of the U.S. that are earthquake-prone (more likely to have earthquakes). \_\_\_\_\_

## DICTIONARY SKILLS/VOCABULARY

5. Look up each of these earthquake terms in the dictionary. Then write its correct meaning.  
tsunami: \_\_\_\_\_  
stress: \_\_\_\_\_  
magnitude: \_\_\_\_\_  
Richter scale: \_\_\_\_\_

## MAIN IDEA

6. What is this story mainly about? \_\_\_\_\_  
\_\_\_\_\_

## SUMMARIZING

7. In one or two sentences, tell what happened during the 1811-1812 earthquakes. \_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

# Earthquake!

## CLASSIFYING INFORMATION

8. What groups do these belong to?

earthquakes, volcanoes, tsunamis: \_\_\_\_\_

John Milne, Grove Gilbert, Harry Reid: \_\_\_\_\_

Arkansas, Missouri, Tennessee, Kentucky, Illinois: \_\_\_\_\_

## FACT OR OPINION

9. Write E if the statement is fact. Write O if it is opinion.

\_\_\_ A seismograph measures ground movements.

\_\_\_ The Richter scale measures how strong an earthquake is.

\_\_\_ It is a bad idea to live in an area that is earthquake-prone.

## CAUSE AND EFFECT

10. What is a major cause of earthquakes? \_\_\_\_\_

11. Many people in the New Madrid Seismic Zone know they are in an earthquake-prone area. What is this knowledge causing them to do?

\_\_\_\_\_

## EVALUATING INFORMATION

12. Do you think it is important for people to know if they live in an earthquake-prone area? \_\_\_\_\_ Why or why not? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### For Further Study/Writing Practice:

Read about *plate tectonics* in an encyclopedia. Write a paragraph about what you find.