

# EARTHQUAKES STUDY GUIDE

Name \_\_\_\_\_ Hour \_\_\_\_\_

See the new Earth Science book, Chapter 15.

1. Define **earthquake**:
2. What can happen during an earthquake?
3. What is the major cause of earthquakes?
4. What are several minor causes of earthquakes?
5. How many earthquakes occur worldwide in one year?
6. Define **focus**:
7. Define **epicenter**:
8. Fill out the following chart:

SEISMIC WAVES	Abbreviation	Travels through s, l, g?	Motion of Wave	Speed of Wave
Primary Wave (Compressional)				
Secondary Wave (Shear)				
Surface Wave				

10. What is a **seismograph**?
11. Briefly describe how a seismograph works.
12. What is a **seismogram**?
13. What does the **Richter Scale** measure?
14. What is the **seismic moment scale**?  
How does this differ from the Richter scale?
15. What are the two main causes of building collapse?
16. What are some areas of the United States where the risk of earthquakes is high??
  - a.
  - b.
  - c.
  - d.

**See new Earth Science book, Chapter 16 page 294.**

17. Fill out the following chart on Types of Faults.

Fault	Sketch	U.S. example	Direction of movement
Normal			
Reverse			
Strike/Slip			

**See the new Earth Science book, Chapter 16, page 291.**

18. Fill in the chart about how mountains result from the collision of plates.

Type of Collision	Example	Describe the process
Oceanic Plate Collides with Continental		
When Two Continents Collide		

**See the “Earthquakes in Missouri” booklet.**

22. What kind of fault is Missouri’s New Madrid Fault Zone? (pg. 4)

How is this different from the three faults in #17 chart?

22. What are two differences between the San Andreas Fault Zone in California and the new Madrid Fault zone in the Midwest? (pg. 11-12)

a.

b.

23. What kinds of hazards can Missouri expect during an earthquake? (pg. 11)

a.

b.

24. Jefferson City is in Cole County. If The New Madrid Fault Zone experiences a Mercalli IX, what kinds of damage can the Cole County area expect? (pg. 13)

25. There is a 50% probability that a \_\_\_\_\_ on the Richter scale will occur by the year 2000. What kinds of damage should be expect? (pg. 13)