

**Review for final exam Important Points to Know for Earthquake Chapter**

Earthquakes

1. Describe what an earthquake is and what causes it. What is an earthquake, elastic rebound, aftershocks, fault creep?
2. Discuss the types of seismic waves emitted during an earthquake and the instrument used to record them. What is a seismograph and how does it work?
3. Know the difference between the surface waves and the various body waves (P and S waves), which gets there first, how they travel and whether they travel through liquid.
4. Explain how the epicenter of an earthquake is located. Know how to locate the source of an earthquake. What is an epicenter and focus of the earthquake?
5. Where are two of the major earthquake belts (circum-Pacific and mid-ocean ridge) and why are there earthquakes in those places? Where in the U.S. are there the least earthquakes?
6. What is earthquake magnitude? How is it measured? What are two of the scales on which it is measured (Richter and moment Magnitude) and how are they different?
7. Distinguish between earthquake intensity and magnitude. What is earthquake intensity? How is it determined? What is the scale on which it is measured (Modified Mercalli Intensity Scale)?
8. How does the elastic rebound theory explain the behavior of earthquakes?
9. What is liquefaction? How does the type of material under buildings affect the amount of damage they sustain during an earthquake?
10. What are tsunamis? What causes them? How do their characteristics differ in the open ocean and near land?
11. What are some of the major damages in an earthquake other than that due to the ground shaking?
12. What should you do during an earthquake?
13. Relate earthquake activity to plate tectonics.