

Chapter 5 Study Guide (Due on May 18, 2009)

1. Understand and be able to describe the movements that occur for each type of fault.
Question: In a reverse fault, the rock forming the hanging wall slides in which direction?

2. Be able to explain how the three different types of stress can occur in the crust.
Question: What is a type of stress, which pushes a mass of rock in two opposite directions?

3. Know how various types of stress can cause the formation of which type of landform.
Question: What type of landform results from compression?

4. Understand the relationship between the various types of stress, faults, and boundaries.
Question: A strike-slip fault has what type of stress placed upon it and forms what type of boundary (2-part question)?

5. Recognize the difference between an anticline and a syncline.
Question: What is an anticline?

6. Know how the forces of plate movement can lead to the process of folding, stretching, or uplifting and change a flat plain into other landforms.
Question: A plateau forms by which process?

7. Know the type of medium various seismic waves can move through.
Question: Primary (P) waves can move through which medium(s)?

8. Know the name and direction of the wavelike motion that is produced by surface waves.
Question: Which direction does the Rayleigh wave travel?

9. Know the three types of scale taught in class that are used to measure earthquakes.
Questions: Which earthquake scale is favored by seismologists because it is more accurate and precise?

For each number increase in magnitude on a Richter scale, ground shaking increases by a factor of what?

10. A sensitive instrument that records and measures seismic waves generated by earthquakes are called?

11. What is subduction?

12. Know the names of the instruments used to monitor faults along with what it measures.
Question: Tilting of the Earth's surface is measured by what instrument?
13. What is the force that opposes the motion of one surface as it moves across another surface called?
14. Know the plates that are associated with earthquakes found along Alaska, California, and Washington.
Question: In Washington State, earthquakes result from the subduction of which plate?
15. Be familiar with the safety protocol for both indoors and outdoors.
Question: If you are indoors during an earthquake, what should you do?
16. What are earthquakes that occur after a larger earthquake in the same area referred to?
17. What is a large wave that can be created when the energy released during an earthquake displaces water and causes those waves to spread out from the epicenter?
18. A base-isolating building has what built into it to help reduce the amount of energy that reaches that building?
19. To estimate the total energy released by an earthquake, a geologist should use which scale?
20. Which are the largest waves on a seismogram?
21. Know the difference between a focus and an epicenter.
Question: The area beneath Earth's surface where rock that is under stress breaks and triggers an earthquake is called?
22. What is the S-P Interval for this seismogram? Caution: P wave does not start at zero (0).

