Changing Earth Study Guide

Answer each of the following questions on a separate piece of paper. Be thorough.

1. List each layer of the Earth from the surface to the center AND describe them.
2. What is Pangaea?
3. Explain Wegner’s continental drift theory.
4. List the evidence that Wegner had to support his theory.
5. Why was Wegner’s theory rejected?
6. Explain transform, convergent, and divergent boundaries.
7. Explain plate tectonics.
8. What happens to pressure and temperature as you move deeper in the Earth?
9. Explain sea-floor spreading.
10. What evidence did Hess have for sea-floor spreading?
11. Explain what happens when 2 ocean plates collide, 2 continental plates collide, and 1 ocean and 1 continental plate collide.
12. Explain convection currents.
13. Name and explain the 3 kinds of stress that can occur in the crust.
14. Describe a normal fault.
15. Describe hanging walls and foot walls.
16. Describe anticlines and synclines.
17. What is a focus? What is an epicenter?
18. Describe P and S waves.
19. How are the Mercalli and Richter scales different? How are they alike?
20. What is an aftershock?
21. What is the best way to protect yourself in an earthquake?
22. Explain active, dormant, and extinct volcanoes.
23. Explain the difference between magma and lava.
24. Name the 3 kinds of volcanoes and describe how each form.
25. Describe relative age and absolute age.
26. Why do earthquakes and volcanoes often occur in the same area?
27. List the four major eras of Earth’s geologic history and briefly describe what was happening during each era.
28. What are original horizontality and the law of superposition? How do these help geologists determine the age of rocks?
29. What evidence do we have that earth is still changing?
30. How do index fossils help to determine the age of a rock layer?
31. Describe the two types of weathering.
32. Describe how each of the following contributes to weathering.
    1. wind
    2. water
    3. glaciers
33. What is soil? How is it formed?
34. Describe permeable and impermeable soils.