Earth Science Review Sheet

Plate Tectonics, Volcanoes and Earthquakes

Test date = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1. (a) What theory/theories did Alfred Wegener propose?/ State what each of these “said”   (b) What were his four pieces of evidence? | 1. (a)   (b) |
| 1. Why did scientists reject Wegener’s theory when he first proposed it? | 2. |
| 1. Who provided the “missing link” for Wegener in explaining HOW his theories worked? | 3. |
| 1. Which two parts of the Earth make up the lithosphere? | 4.(a)  (b) |
| 1. Which layer of the Earth is composed of liquid metals? | 5. |
| 1. If you were using the soup and crackers analogy, which part of the Earth would the ….. (a) soup be?   (b) cracker be? | 6.(a)  (b) |
| 1. List the three types of plate boundaries. | 7.(a)  (b)  (c) |
| 8. Which layer of the Earth flows like thick plastic? | 8. |
| 1. Which layer of the Earth is a solid metal due to intense pressure and heat? | 9. |
| 1. What happens to the lithosphere at plate boundaries? Is it created, destroyed or is nothing happening to it at all? | 10. |
| 1. (a)What happens to the plates at a divergent boundary?   (b) What can be formed at a divergent  boundary in the ocean?  (c) What can be formed at a divergent  boundary on land? | 11. (a)  (b)  (c) |
| 1. (a) What happens to the plates at a convergent boundary?   (b) What can form between two convergent oceanic crusts?  (c) What can form between two continental crusts?  (d) What can from between an oceanic and continental crust? | 12(a)  (b)  (c)  (d) |
| 1. (a) What happens to the plates at a transform boundary?   (b) What major geologic event occurs at a transform boundary?  (c) Is the lithosphere created or destroyed at a transform boundary? | 13(a)  (b)  (c) |
| 1. List two causes of earthquakes. | 14(a)  (b) |
| 1. What does the magnitude of an earthquake measure? | 15. |
| 1. Can rocks moving deep within the Earth due to stress cause earthquakes? | 16. |
| 1. What are seismic waves? | 17. |
| 1. What does viscosity measure? | 18. |
| 1. When does subduction occur? | 19 |
| 1. When plates are moving… 2. Do they move quickly? 3. Are there ever any gaps between them? | 20 (a)  (b) |
| 1. (a)In which layer of the Earth are convection currents found?   (b)Which type of movement do these convection currents cause? | 21.(a)  (b) |
| 1. Is North Carolina on the edge or near the edge of a tectonic plate? | 22 |
| 1. Which state has experienced the most earthquakes? | 23. |
| 1. Look at the Plate Tectonic Map Activity we completed in class. 2. Is there a plate boundary in the Atlantic Ocean? 3. What type of boundary is this? 4. What is this doing to the size of the Atlantic Ocean? | 24.(a)  (b)  (c) |
| 1. Which type of seismic waves….. 2. Do the most damage? 3. Are the fastest? 4. Can travel through liquids and solids? 5. Causes rocks to move up and down under the surface? 6. Causes rocks to move back and forth under the surface? 7. Causes rocks to move up & down AND back & forth? | 25.(a)  (b)  (c)  (d)  (e)  (f) |
| 1. What is the minimum number of seismic locations needed to determine the epicenter of an earthquake? | 26. |
| 1. Which scale is used by the media to describe the strength of an earthquake? | 27. |
| 1. Major earthquakes are followed by movements of the Earth called \_\_\_\_\_. | 28. |
| 1. Do S waves travel through the…. 2. Lithosphere? 3. Inner core 4. Mantle 5. Crust? | 29.(a)  (b)  (c)  (d) |
| 1. What is the highest possible magnitude for an earthquake? | 30. |
| 1. What is the BEST scale used to measure earthquakes, no matter how big or how far away? | 31. |
| 1. What type of boundary is the San Andreas Fault system? | 32. |
| 1. What instrument is used to measure an earthquake? | 33 |
| 1. Which type of energy is released by the Earth that causes natural vibrations to occur? | 34. |
| 1. What is the….. 2. Term for the fracture where plates separated? 3. Origin of an earthquake inside the Earth called? 4. Point directly above an earthquake’s focus called? This is located on the surface of the Earth. 5. The amount of damage to the structures involved in an earthquake? 6. The type of fault formed along transform boundaries? 7. The type of fault formed along convergent boundaries? 8. The type of fault formed along divergent boundaries? 9. The scale used by scientists to compare the energy released by earthquakes? | 35.(a)  (b)  (c)  (d)  (e)  (f)  (g)  (h) |
| 1. What is liquid rock BELOW the surface of the Earth called? | 36. |
| 1. What is liquid rock ABOVE the surface of the Earth called? | 37. |
| 1. What is volcanic activity in the middle of a plate called? | 38. |
| 1. Can a volcano formed by a hot spot still erupt once the plate moves away from the hot spot? | 39. |
| 1. What is the term given to ALL of the material that is thrown into the air during a volcanic eruption? | 40. |
| 1. What is formed at the Ring of Fire? | 41. |
| 1. What is the rapidly moving gaseous volcanic material called? | 42. |
| 1. Lava erupts through an opening called a \_\_\_\_\_. | 43. |
| 1. Which type of volcano is…. 2. The most gentle? 3. The largest of the volcanoes? 4. Violently explosive? 5. Has gently sloping sides? 6. Has steep sides? | 44(a)  (b)  (c)  (d)  (e) |
| 1. What is…. 2. A famous volcano that is part of the Ring of Fire? 3. A small bowl shaped depression at the top of a volcano? 4. A large bowl shaped depression at the top of a volcano? 5. A famous volcano in Italy that is part of the Mediterranean Belt? 6. The flow of clouds, gas and ash down a slope at REALLY fast speeds? | 45(a)  (b)  (c)  (d)  (e) |
| 1. (a) What was the name given to the “supercontinent”?   (b)How long ago is it thought by some to have existed? | 46(a)  (b) |
| 1. Where is the youngest part of the ocean floor found? | 47. |
| 1. How does oceanic crust compare to continental crust with relation to… 2. Thickness? 3. Density? | 48(a)  (b) |
| 1. What is being illustrated in the diagram below? | 49. |