Name _____ Class_____Date_____

STUDY GUIDE Geology

MULTIPLE CHOICE: WRITE THE LETTER OF THE CORRECT ANSWER IN THE SPACE PROVIDED.

_____ 1. What is the outermost layer of the Earth called?.

_____ 2. What is the liquid layer of the Earth's core called?

_____ 3. In a reverse **fault**, where does the hanging wall move relative to the

_____ 4. In a normal **fault**, where does the hanging wall move relative to the

_____ 5. What is the area where two tectonic plates meet called?

_____ 6. What type of boundary is formed when plates collide?

_____ 7. What type of boundary is formed when plates separate?

_____ 8. What type of boundary is formed when plates slide past each other?

_____ 9. According to the continental drift theory, a single, huge continent once

_____ 10. Where does sea-floor spreading take place?

_____ 11. Rock begins to melt when

_____ 12. Which of these describes a possible climate change caused by a volcanic eruption?

_____ 13. Which type of seismic wave can travel through solids, liquids, and gases?

_____ 14. Colliding continental plates occur at which type of boundary?

_____ 15. A break in a body of rock along which one slides relative to the other is called a

_____ 15. What is the bending of the Earth's crust in a spring-like manner called?

_____ 16. What is the sudden return of elastically deformed rock to its original shape caused?

_____ 17. The Ring of Fire refers to

Study and learn the following terms/ideas for the geology test:

Asthenosphere	Elastic rebound	Inner core	Reverse fault	Seismograph
Convergent boundary	Elastic deformation	Lithosphere	Seismic gaps	Subduction
Divergent boundary	Epicenter	Outer core	Seismic wave	Transform boundary
P waves, S waves	Focus	Pangaea	seismogram	Uplift
How can volcanoes cause climate change?				
How can changes in temperature and pressure cause rocks to melt into magma?				
Focus – the point along a fault at which the first motion of an earthquake occurs				
Epicenter – point on earth's surface *DIRECTLY ABOVE* the focus (point where the earthquake starts)				

Name _____ Class_____Date_____

Illustrate and explain what a *subduction zone* is in the space provided (3 points).

18. A **subduction zone** is…(explain in words)__

_____

_____

Illustration of a subduction zone

Plate Tectonics

USING KEY TERMS (WORD BANK WILL BE PROVIDED)

19. The lithosphere floats on a layer of the Earth's mantle called the _____
20. The mantle mainly consists of a dense layer called the _____
21. The liquid layer at the Earth's center is known as the _____
22. The theory describing the movement of the Earth's continents is known as _____
23. The process whereby rock layers are raised to higher elevations is _____
24. The process that takes place at mid-ocean ridges is called _____

Earthquakes

USING KEY TERMS (WORD BANK WILL BE PROVIDED)

25. The instrument used to record earthquakes is a(n) _____.
26. The point at which an earthquake begins, called the_____ is located along a fault; the epicenter is found directly above this point on the surface of the Earth.
27. Sections along an active fault may have_____ where there is little earthquake activity.
28. There are two types of_____ in which rock changes shape because of stress.
29. Body waves are_____ that travel through Earth.

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Illustrate and explain what a *continental drift* is in the space provided (3 points).

30. **Continental drift** is…(explain in words)_____

_____

_____

_____

Illustration of continental drift

Illustrate and explain how scientists detect and record seismic activity (10 points).

In your explanation, use the following terms: **Richter scale, seismograph, seismic waves, epicenter**

31. **Detecting earthquakes is done by:** _____

_____

_____

_____

_____

_____

Illustration of sensing, measuring, or recording seismic activity
(continue on back if necessary)