

# Geology Unit Practice Test

Name:

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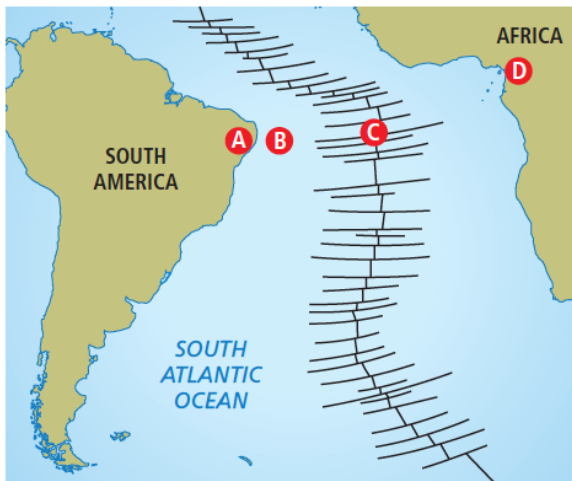
- List and explain the five pieces of evidence that support Continental Drift Theory.
- What land mass does Pangaea refer to?
- Complete the following table with the layers of the Earth:

Layer	State	Thickness	Composed of...
	<i>Solid</i>		<i>Granite</i>
<i>Mantle</i>			
	<i>Liquid</i>		
	<i>Solid (molten)</i>		

- Convection currents occur in which layer of the earth?
- Describe how convection currents affect the movement of tectonic plates. Draw a diagram to explain your answer.
- What is a tectonic plate?
- What is the Mid-Atlantic Ridge? Where is it found? Identify the Mid-Atlantic Ridge on the map below.



8. Use the diagram of the Mid-Atlantic Ridge below to answer the questions that follow:



a) How does the thickness of the crust at location A compare to the thickness of the crust at location B?

b) Where is the youngest rock located?

c) How does the age of rock at A compare to the age of rock at D?

d) Where is magma most likely to be rising to the surface?

9. What is seafloor spreading? Explain this process using the terms “ridge push” and “slab pull”.

10. What is a geologic hot spot? What happens when a tectonic plate passes over a hot spot?

11. Describe the theory of plate tectonics.

12. Describe the age of rocks relative to their distance from an ocean ridge at a divergent plate boundary.

13. Name and draw the three main types of tectonic plate boundaries.

i.

ii.

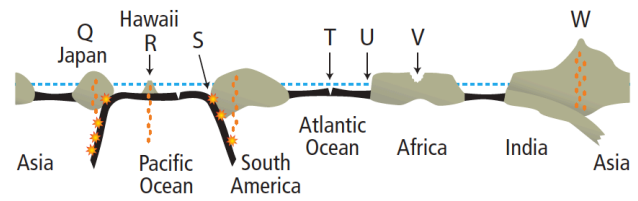
iii.

14. Why does subduction occur at some kinds of tectonic plate boundaries but not at others?

15. Name a mountain range produced by continental-continental plate convergence.

16. The diagram below is a cross-section showing different types of tectonic plates and geological features.

- \_\_\_\_\_ Continental-continental plate convergence
- \_\_\_\_\_ Trench
- \_\_\_\_\_ Hot spot
- \_\_\_\_\_ Volcanic island arc
- \_\_\_\_\_ Mid-ocean ridge



17. Fill in the following table regarding seismic waves:

Seismic wave	Abbreviation	Description	Diagram
<i>Primary</i>			
	<i>S</i>		
		<i>Moves only along the surface</i>	

18. Complete the following table:

Type of Volcano	Structure	Where they occur	Example
	<i>Cone-shaped</i>		
<i>Shield</i>			
			<i>Mid-Atlantic Ridge</i>

19. Why do earthquakes and volcanoes occur at tectonic plate boundaries?

20. Identify **two** ways in which a tsunami is different from a regular ocean wave.

21. Match the term with the descriptor. Each descriptor can only be used once.

<b>Term</b>	<b>Descriptor</b>
1. ____ Continental drift theory	A. A process that results in the Mid-Atlantic Ridge
2. ____ Plate tectonic theory	B. The point on the Earth's surface directly above the focus
3. ____ Spreading ridge	C. The theory that the crust is broken up into large plates that move and then rejoin
4. ____ Magma	D. Vibrating energy released by an earthquake
5. ____ Mid-Atlantic Ridge	E. A geological feature that results from sea-floor spreading
6. ____ Sea floor spreading	F. The most inner layer of the Earth
7. ____ Convergent plate boundary	G. An area where tectonic plates collide
8. ____ Divergent plate boundary	H. The most outer layer of the Earth
9. ____ Transform plate boundary	I. A massive release of energy that shakes the crust
10. ____ Crust	J. The location inside Earth where an earthquake starts
11. ____ Mantle	K. Hot fluid below or within the Earth's crust
12. ____ Inner Core	L. A compression wave that travels through solids, liquids and gases
13. ____ Outer Core	M. An area where tectonic plates slide past one another
14. ____ Tectonic plates	N. A wave that travels along the Earth's surface
15. ____ Earthquake	O. A measurement of an earthquake
16. ____ Focus	P. A long mountain range running north to south down the length of the Atlantic Ocean
17. ____ Epicentre	Q. The second most inner layer of the Earth
18. ____ Seismic waves	R. The theory that the continents have not always been in their present locations but have moved over millions of years.
19. ____ P wave	S. An area where tectonic plates are spreading apart
20. ____ S wave	T. A transverse wave that does not travel through the liquid mantle
21. ____ L wave	U. The large slabs or rock that form Earth's surface and move over a layer of partly molten rock
22. ____ Richter magnitude scale	V. The layer of the Earth where convection currents occur