

Geology

1. List and explain the 5 pieces of evidence that support Continental Drift Theory.

Evidence	Explanation
1.	
2.	
3.	
4.	
5.	

2. Name the four layers of the Earth, in order from the inside out:

3. What important process occurs in the mantle? Draw a labeled sketch of this process.

4. How does this contribute to plate movement?

5. What geological feature is formed at subduction zones?

6. Fill in the following table:

Plate Boundary	How the plates interact	Diagram	Example

7. There are three types of convergent boundaries. List and describe each. In your answer, identify which creates a subduction zone.

8. 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>	

9. Complete the following table:

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

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

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

Term	Descriptor
___ Continental drift theory	A. Hot fluid below or within the Earth's crust
___ Plate tectonic theory	B. The most outer layer of the Earth
___ Magma	C. The theory that the crust is broken up into large plates that move and then rejoin
___ Mid-Atlantic Ridge	D. The region where magma breaks through Earth's surface, continually forcing apart old rock and forming sea floor
___ Sea floor spreading	E. The most inner layer of the Earth
___ Convergent plate boundary	F. A compression wave that travels through solids, liquids and gases
___ Divergent plate boundary	G. An area where tectonic plates slide past one another
___ Transform plate boundary	H. A rupture in the crust where hot lava, ash and gas escape from a magma chamber below the surface
___ Crust	I. The location inside Earth where an earthquake starts
___ Mantle	J. A long mountain range running north to south down the length of the Atlantic Ocean
___ Inner Core	K. The point on the Earth's surface directly above the focus
___ Outer Core	L. A series of water waves that is generated when the sea floor deforms and abruptly moves the water
___ Tectonic plates	M. A wave that travels along the Earth's surface
___ Earthquake	N. A measurement of an earthquake
___ Focus	O. An area where tectonic plates collide
___ Epicentre	P. The large slabs or rock that form Earth's surface and move over a layer of partly molten rock
___ Seismic waves	Q. The theory that the continents have not always been in their present locations but have moved over millions of years.
___ P wave	R. An area where tectonic plates are spreading apart
___ S wave	S. A transverse wave that does not travel through the liquid mantle
___ L wave	T. Vibrating energy released by an earthquake
___ Richter magnitude scale	U. The layer of the Earth where convection currents occur
___ Tsunami	W. The second most inner layer of the Earth
___ Volcano	V. A massive release of energy that shakes the crust