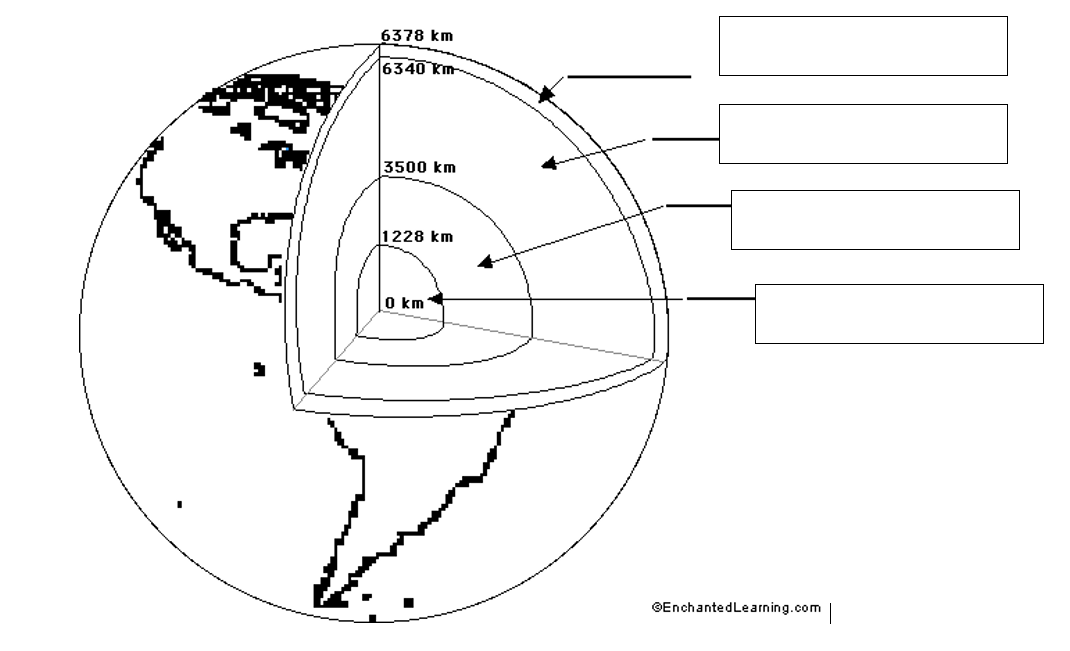
**Earth Science Revision**

**1.** Label the layers of the Earth on the diagram below.



**2.** Which of the layers of the Earth is:

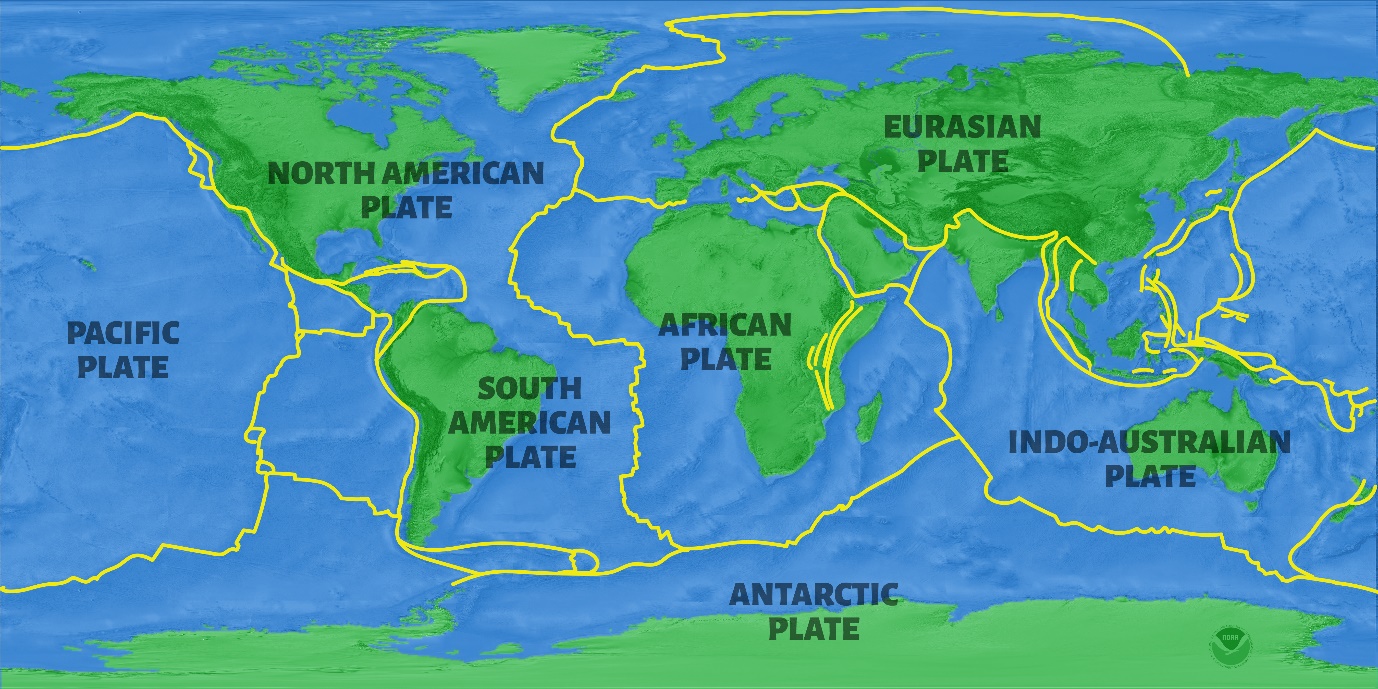
**a)** the thickest **d)** liquid

**b)** the hottest **e)** solid

**c)** mainly iron and nickel **f)** thinnest

**3.** Name the two types of crust, and describe the main characteristics of each type. (eg: location, density, rock composition, thickness)

**4.** Label the map below with the names of the major plates:



**5.** Name the scientist who first proposed that the continents moved, and name his theory.

**6.** Describe at least 2 types of evidence that supports the theory of plate tectonics.

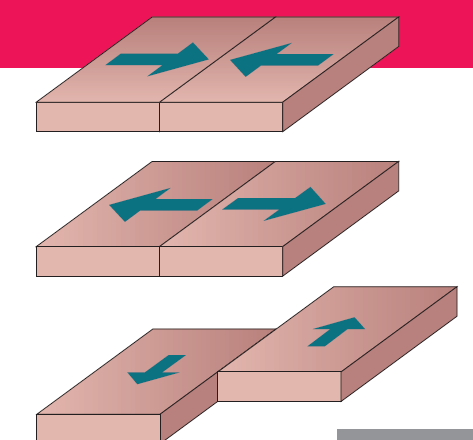
**7.** Identify the source of heat that drives plate tectonics.

**8.** Explain the movement of tectonic plates with reference to heat energy and convection currents.

**9.** Explain the process of sea floor spreading

**10.** Explain the process of subduction

**11.** Name the three types of plate boundary shown in the diagram below.



**12.** Describe plate boundaries where the following may occur:

**a)** subduction

**b)** ocean trenches

**c)** fold mountains

**d)** rifting under the sea

**e)** an ocean trench next to a continental mountain range

**f)** earthquake

**13.** At diverging boundaries, seafloor spreading is occurring as new crust is continually created. Explain why the Earth’s crust overall is not getting any bigger.

**14.** Use the theory of plate tectonics to explain why most earthquakes and volcanoes occur near plate boundaries.

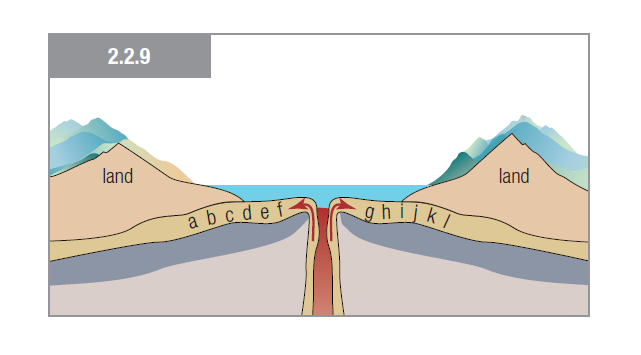
**15.** Explain why is Australia considered to be a very geologically stable country.

**16.** Distinguish between the focus and the epicentre of an earthquake

**17.** Australia is moving northward at a rate of approximately 5cm per year. Determine how far will it move in an average human lifetime (approx. 80 years).

**18.** Classify the three types of plate boundaries (transform, converging and diverging) as being either constructive, destructive or conservative, and explain why they are classified this way.

**19.** Figure 2.2.9 shows part of a spreading boundary underneath the ocean. Identify which rock would be the same age as rock **b**, and explain how you know.



**20.** Complete the table below to summarise the different types of plate boundaries:

|  |  |  |  |
| --- | --- | --- | --- |
| Plate Boundary | Diagram | Description | Landforms |
| Divergent |  |  |  |
| Convergent Subduction plate boundaries  Oceanic vs Continental plates |  |  |  |
| Convergent Collision plate boundaries  Continental vs Continental Plates |  |  |  |
| Transform plate boundaries |  |  |  |

**21.** Define the following terms:

Continental Drift Ocean Trench Plate tectonics Seafloor spreading Subduction

Continental crust Converging boundary Diverging boundary Oceanic Crust Focus

Transform boundary Epicentre Earthquake Magma Seismic wave Volcano

Hot spot P wave S wave Tsunami Seismometer Plate tectonics

