

Turn to the page of your reference tables that supplies information about the Earth's interior:

Page: _____

1. The four layers of the earth are _____

2. Which is the thickest of the layers? _____ How thick is it? _____

SHOW WORK BELOW

3. Circle the properties of the layers that increase as depth increases:

MELTING POINT

TEMPERATURE

PRESSURE

DENSITY

THICKNESS

AMOUNT OF LIQUID

What is the approximate temperature, pressure, and density at a depth of 4000 km?

Temperature: _____

Pressure: _____

USE PROPER UNITS

Density: _____

5. If a material's temperature is above its melting point what state is it in? _____

If a material's temperature is below its melting point what state is it in? _____

Now look at the graph of **ACTUAL TEMPERATURE** and **MELTING POINT**

Which layers are partially or completely liquid? _____

Explain how the graphs indicate this. _____

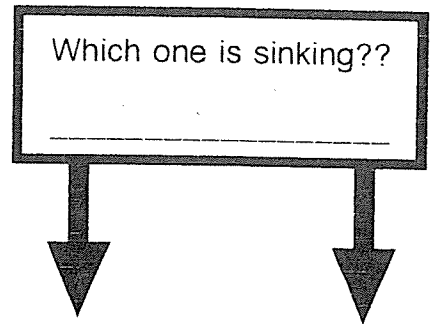
6. How many plate boundaries are shown in the upper layers of the earth? _____

Draw diagrams of these below

7. Why must one plate be sinking beneath another? _____

What is the density of the ocean's crust? _____

What is the density of the continent's crust? _____



8. What rock type or elements make up the following layers:

(You may have to look up some of this information...oh no, do we have to....yes you do)

Continental Crust _____ Outer Core _____

Oceanic Crust _____ Inner Core _____

Mantle _____

9. Reflect upon the information in this lab in order to develop a theory: What might allow the lithosphere to break into smaller pieces (plates), which can then be moved by the underlying asthenosphere? How is the asthenosphere itself able to move? Where does the energy for this process come from?
