

### **Geosphere Introduction**

1. From the outside to the inside, list the major layers of the Earth, their thickness, and what they are made of in the table below.

<b>Layer Name</b>	<b>Thickness</b>	<b>What is it made of?</b>

2. Looking more closely at the crust and mantle, what two additional layers are there? What are the distinctive properties of these two layers? Use the table below to fill in your answers.

<b>Layer Name</b>	<b>Is it solid or malleable?</b>	<b>Is it made of crust, mantle, or both?</b>	<b>Is it broken into tectonic plates?</b>

3. Briefly describe plate tectonics theory.

4. How many plates are there on the earth?

5. There are two types of crust. Fill in the table below to describe the properties of each type.

<b>Crust Type</b>	<b>Average Thickness</b>
Continental	
Oceanic	

6. There are three major types of plate boundaries. Using the table below identify these three boundaries and describe their features.

<b>Type of Boundary</b>	<b>Definition</b>	<b>Name one location where this type of boundary is found</b>

7. What type of plate boundary causes subduction zone volcanism or mountain building?
8. What type of plate boundary is associated with rift zones and mid-ocean ridges?

9. What type of plate boundary results in active fault zones where large earthquakes are possible?