

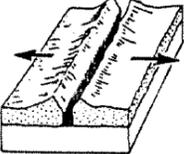
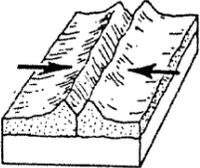
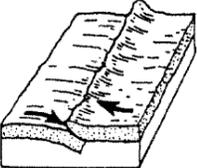
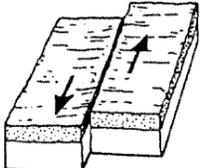
## 4.2 Worksheet

**Fill in the blanks using the following word bank:**

asthenosphere	lithosphere	plate tectonics
convection current	plates	

The theory of \_\_\_\_\_ states that the Earth's crust and upper mantle are broken into sections. These sections, called \_\_\_\_\_, are composed of the crust and a part of the upper mantle. The crust and upper mantle are called the \_\_\_\_\_. Beneath this layer (the answer from #3) is a layer with plasticity or the ability to flow, called the \_\_\_\_\_. Many scientists think hot magma from the asthenosphere is forced upward toward the surface, cools, and sinks. This process is called a \_\_\_\_\_ current.

**Four diagrams are shown in the table below. Select from the following terms: subduction, divergent boundary, convergent boundary, or transform fault. Make sure to explain the motion at each boundary.**

Diagram	Type of boundary and motion at boundary	Diagram	Type of boundary and motion at boundary
6. 		8. 	
7. 		9. 	

**Fill in the blanks using the following word bank:**

inner core	liquid	rock
iron and nickel	outer core	solid

Scientists know Earth's interior is made mostly of layers of \_\_\_\_\_ . Some layers, like the center part, called the \_\_\_\_\_ are hard and \_\_\_\_\_ . Other layers are not. The layer next to the center, called the \_\_\_\_\_, is \_\_\_\_\_. Both parts of the core are made of \_\_\_\_\_ .

**Fill in the blanks using the following word bank:**

continents	mantle	plasticity	crust
oceans	soil	hot	

The largest layer inside Earth is called the \_\_\_\_\_. It's neither completely solid nor completely liquid, but has \_\_\_\_\_. It's extremely \_\_\_\_\_. Earth's outermost layer is the \_\_\_\_\_. This layer is about 5 km thick under the \_\_\_\_\_ and up to 35 km thick under the \_\_\_\_\_. On top of the outer layer is the weathered rock we call \_\_\_\_\_ .

## Multiple Choice:

1. Seafloor spreading occurs at which of the following plate boundaries?
  - a. Divergent
  - b. Transform
  - c. Convergent
  - d. Subduction
2. Which of the following may result from the collision of one plate with another?
  - a. A convergent boundary
  - b. A divergent boundary
  - c. A rift valley
  - d. A transform fault
3. Where in the earth do convection currents occur?
  - a. In the lithosphere
  - b. Along a subduction zone
  - c. In the asthenosphere
  - d. Along a rift valley
4. A fault formed at the point where two plates slide past each other is called a \_\_\_\_\_.
  - a. Slip-Strike fault
  - b. Transform fault
  - c. Transform boundary
  - d. All of the above
5. The theory that proposes a possible explanation of why and how continents move is called the theory of \_\_\_\_\_?
  - a. Pangaea
  - b. Plate tectonics
  - c. Paleomagnetism
  - d. None of the above