The Lithosphere and Asthenosphere

Use with textbook page 290.

1. Describe how the following terms are related:
   a) lithosphere and crust

   _____

   b) lithosphere and mantle

   _____

   c) asthenosphere and mantle

   _____

2. What is the key role of the asthenosphere in the theory of plate tectonics?

   _____

   _____

3. What characteristics of the asthenosphere make it suitable for moving Earth's tectonic plates?

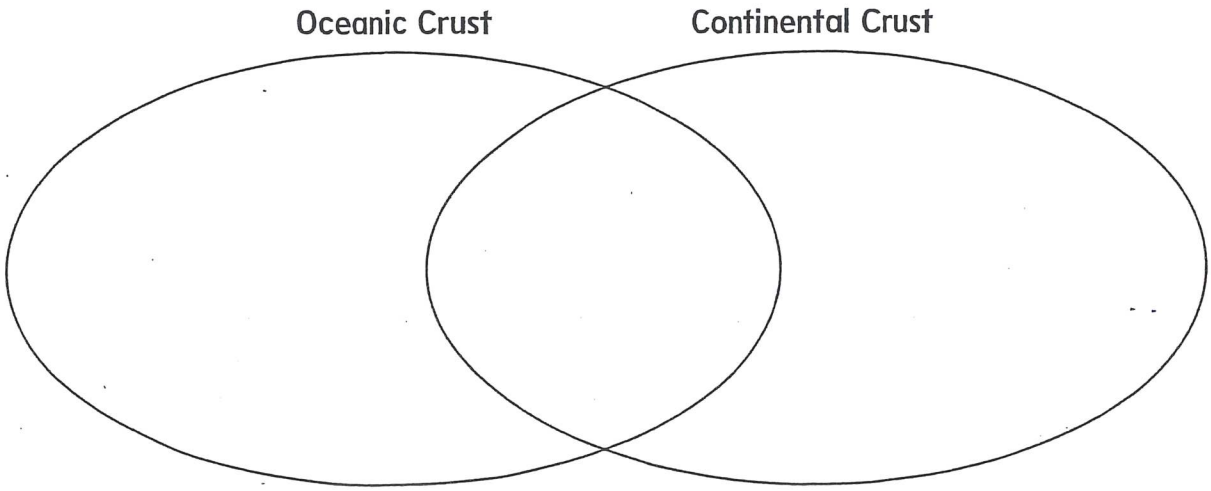
   _____

   _____

4. One analogy compares the asthenosphere to toothpaste or melted tar. Come up with your own analogy to describe the asthenosphere.

   _____

5. Use the Venn diagram to compare and contrast continental and oceanic crust.

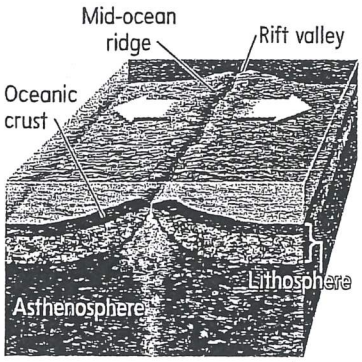
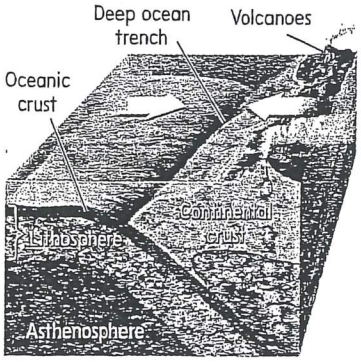
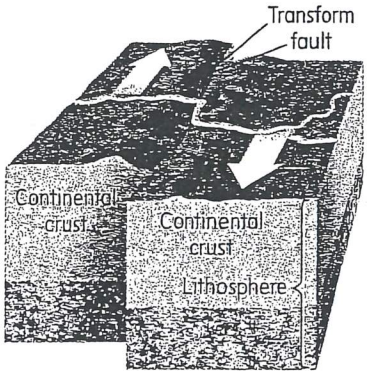


Name Date

Plate Boundaries

Use with textbook pages 291–292.

1. Identify each type of plate boundary shown in the table, and describe the type of geological activity that occurs at that boundary.

Plate Boundary: _____	Plate Boundary: _____	Plate Boundary: _____
		
Geological Activity	Geological Activity	Geological Activity

2. Use your understanding of divergent and convergent plate boundaries to explain why the surface of Earth is not getting any larger or smaller.

_____

_____