

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.

