



Earth's Layers

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. Why is the inner core solid even though it is the hottest part of Earth?

- A) It is made of a special type of rock that never melts.
- B) The enormous pressure at the center keeps the metal packed into a solid.
- C) It is too far from the mantle's heat to melt.
- D) The outer core absorbs all the heat before it reaches the inner core.

2. A scientist notices that S-waves from an earthquake disappear when they reach the outer core. What does this tell the scientist?

- A) The outer core is made of the same material as the mantle.
- B) The outer core must be a gas because waves cannot pass through it.
- C) The outer core is liquid because S-waves cannot travel through liquids.
- D) The outer core is too thin for waves to pass through.

3. Which layer of Earth is responsible for driving the movement of tectonic plates?

- A) The crust, because the plates sit on its surface.
- B) The inner core, because it is the hottest layer.
- C) The mantle, because its slow-flowing convection currents push the plates.
- D) The outer core, because its liquid metal creates strong forces.

4. Why is the oceanic crust denser than the continental crust?

- A) Oceanic crust is older and has been compressed longer.
- B) Oceanic crust is made of basalt, which is denser than the granite in continental crust.
- C) Oceanic crust is closer to the mantle and absorbs heavy minerals.
- D) Oceanic crust contains more water, which makes it heavier.

Part B: Fill in the Blank

Write the correct answer on each line.

1. As you travel deeper into Earth, both temperature and _____ increase steadily.
2. The mantle behaves like a very slow-moving _____ even though it is made of rock.
3. Earth's layers are classified based on their composition, temperature, and _____ of matter.
4. The boundary between the crust and the mantle is called the _____.

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Part B: Fill in the Blank

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1. As you travel deeper into Earth, both temperature and pressure increase steadily.
2. The mantle behaves like a very slow-moving fluid even though it is made of rock.
3. Earth's layers are classified based on their composition, temperature, and state of matter.
4. The boundary between the crust and the mantle is called the Moho.