## Layers of the Earth Quiz

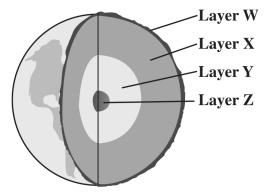
- Name:
- 1. Which of the following statements *best* explains why the lower mantle of Earth is much more rigid and dense than the upper mantle?
  - A. The lower mantle is older than the upper mantle.
  - B. The lower mantle is cooler than the upper mantle.
  - C. The lower mantle is under more pressure than the upper mantle.
  - D. The lower mantle is farther from the core than the upper mantle.
- 2. Jamal makes a scale model of Earth for a school project. In his model, he uses different materials to show each layer of Earth. Which layer in his model should be the thinnest?

A.	Mantle	В.	Crust
C.	Outer core	D.	Inner core

3. A layer of solid brittle rock comprises the outer 100 kilometers of Earth. This layer, which contains both the crust and the upper mantle, is called the

A.	core.	В.	sediment.
C.	lithosphere.	D.	hemisphere.

4. The diagram below shows four layers of Earth's internal structure.

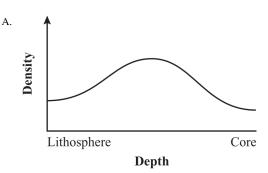


Which layer is composed mostly of solid iron and nickel?

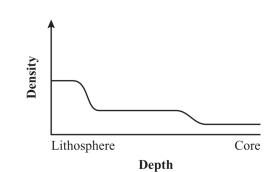
A. layer W B. layer X C. layer Y D. layer Z

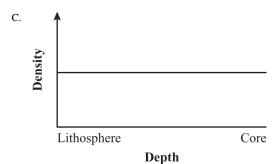
- 5. Which part of Earth is hottest?
  - A. Core B. Crust C. Mantle D. Surface

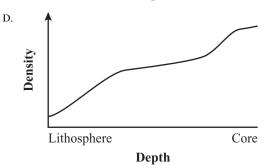
6. Which of the following graphs *best* represents the relationship between density and depth of material below Earth's surface?





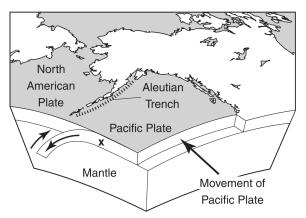






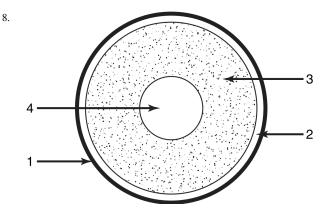
## 7. Use the information below to answer the question(s) below.

The Aleutian Trench is an underwater feature, near Alaska, formed by the movement of two tectonic plates. As the North American Plate moves toward the Pacific Plate, the lower edge of the Pacific Plate becomes part of the mantle.



The core of Earth is best described as

- A. a hot mass of metal B. a cold mass of metal
- C. less dense than the crust D. less dense than the mantle

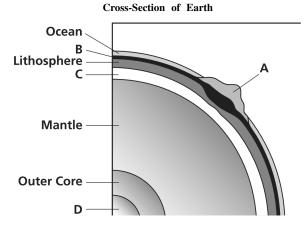


Which numbered arrow indicates the core of Earth?

A. Arrow 1 B. Arrow 2 C. Arrow 3 D. Arrow 4

- 9. About 30 miles into Earth, the speed of seismic waves increases. What does this change in speed indicate about the material through which the seismic waves are traveling?
  - A. The waves travel from rock into metal material.
  - B. The waves travel from cool material into hot material.
  - C. The waves travel from solid material into liquid material.
  - D. The waves travel from a less dense material into a more dense material.

- 10. Which of these describes the lithosphere?
  - A. Topmost solid part of Earth in which crust is located
  - B. Middle liquid, flowing layer of Earth on which crust floats
  - C. Middle plastic, flowing layer of Earth on which the asthenosphere floats
  - D. Topmost semisolid part of Earth in which magma chambers for volcanoes form
- 11. In which layer of Earth can a garden and rocks be found?
  - A. Exosphere B. Hydrosphere
  - C. Lithosphere D. Stratosphere
- 12. In which major layer of Earth is soil found?
  - A. Crust B. Mantle
  - C. Inner core D. Outer core
- 13. Which of these describes the lithosphere and the asthenosphere?
  - A. The lithosphere is rigid and immovable, and the asthenosphere is hot and flowing.
  - B. The asthenosphere is rigid and immovable, and the lithosphere is hot and flowing.
  - C. Both are hot inner layers of earth capable of bending and moving.
  - D. Both are hard and rigid layers of earth close to the surface.
- 14. The following diagram shows a cross-section of Earth.



Which letter represents the location of the asthenosphere?

A. A B. B C. C D. D