

Earth History quiz 2017

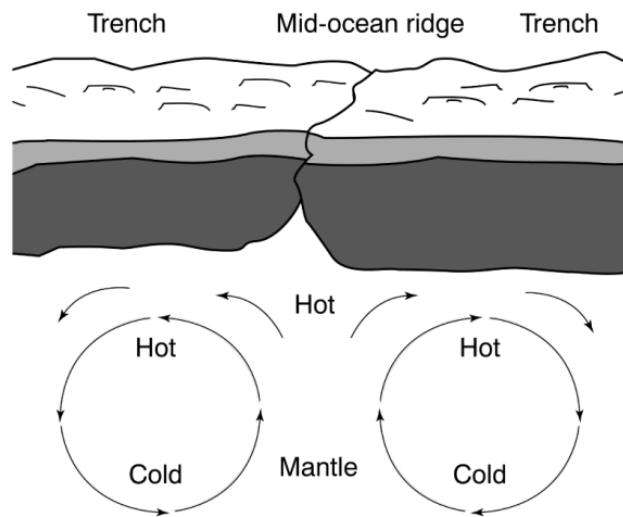
Name: _____

Date: _____

1. The youngest rocks on the ocean floor are typically located near what feature?

- A. a mid-ocean ridge B. a continental shelf C. an abyssal plain D. a subduction trench

2. Use the diagram below to answer the question.

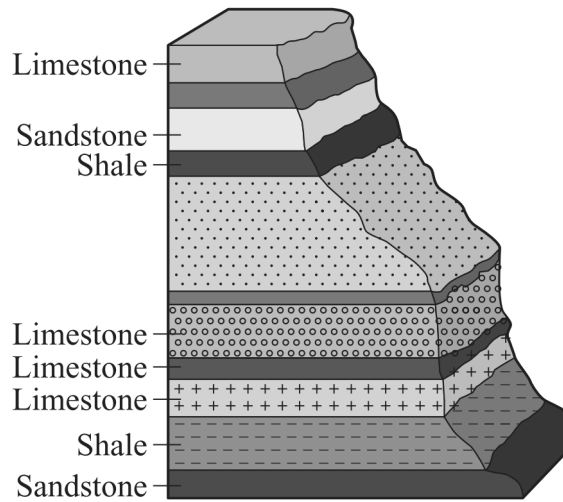


Based on the diagram, which process explains why less dense, hot magma rises to the surface to displace more dense, cooler magma?

- A. conduction B. diffusion C. radiation D. convection

3. The diagram below shows some of the layers of rocks found in the Grand Canyon. Scientists find these layers of rock useful for studying fossils.

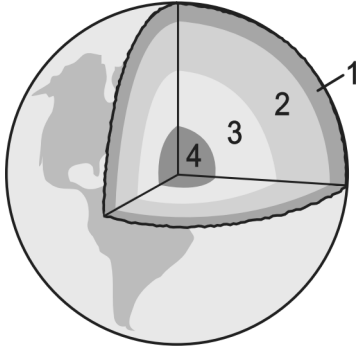
Grand Canyon Rock Layers



What type of rock is shown labeled in these layers?

- A. extrusive B. igneous C. metamorphic D. sedimentary
4. Which type of rock is formed when hot lava cools?
- A. coal B. igneous C. limestone D. metamorphic
5. Which of the following Earth layers has the *greatest* density?
- A. crust B. mantle C. inner core D. outer core

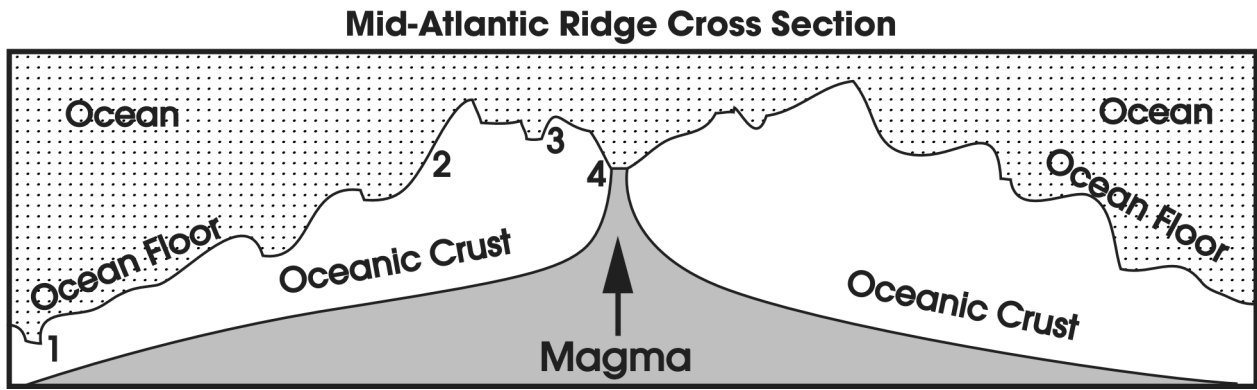
6. The diagram below shows four layers of Earth. Each layer is identified by a number.



Which layer of Earth is composed *primarily* of solid iron?

- A. layer 1 B. layer 2 C. layer 3 D. layer 4
7. Which *best* summarizes the composition of Earth's core?
- A. It contains a solid outer region surrounding a liquid iron core.
B. It contains a liquid outer region surrounding a solid iron core.
C. It contains a semi-liquid rock outer region surrounding a liquid core.
D. It contains a basalt, semi-liquid outer region surrounding a solid core.
8. Which *best* describes Earth's crust?
- A. It is stationary and unable to move. B. It is thicker than the mantle and the core.
C. It is located between the outer and the inner core. D. It is composed of continental and oceanic plates.

9. The following diagram shows a cross-section of the mid-Atlantic Ridge.



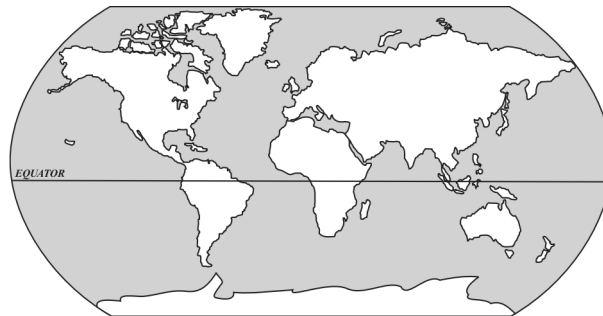
Which area is likely the oldest crust?

- A. 1 B. 2 C. 3 D. 4
10. Which of the following is the best evidence that Earth's continents were once in vastly different positions than they are today?
- A. Penguins are found only in the Southern Hemisphere.
B. Fossils of tropical plants are found in Antarctica.
C. Volcanoes encircle the Pacific Ocean.
D. Major rivers form deltas from continental erosion.
11. Which of the following *best* describes Earth's tectonic plates?
- A. They move away from each other at the equator.
B. They move because of convection currents in the mantle.
C. They collide at midocean ridges.
D. They form at subduction zones.

12. Scientists have found fossils of tropical plants in Antarctica. How could tropical plants have grown in Antarctica?
- A. At one time, Earth's entire surface was a tropical rain forest.
 - B. At one time, Antarctica was located closer to the equator.
 - C. The rotation of Earth has increased, causing cooling of the atmosphere.
 - D. Catastrophic volcanic eruptions melted the ice and exposed the soil to sunlight.

13. Which statement best describes Earth's crust and mantle?
- A. The crust is thicker and less dense than the mantle
 - B. The crust is thicker and more dense than the mantle
 - C. The crust is thinner and less dense than the mantle
 - D. The crust is thinner and more dense than the mantle

14.



This map shows the continents as they appear on Earth's surface today. It would be correct to say that in another 50 years the continents will

- A. have moved to entirely new positions.
- B. be in almost the same positions as they are in today.
- C. have joined to become one large continent.
- D. be moving much faster than they are today.

15. The Mid-Atlantic Ridge exists between the African and South American geologic plates. Which process *most often* occurs at the Mid-Atlantic Ridge?
- A. destruction of underwater mountains
 - B. creation of new continents
 - C. subduction of geologic plates
 - D. spreading of sea floor