socrative
by MasteryConnect

Name: _____ Date: _____

Quiz name: Exit Ticket 10/20 - Act 46 Analysis Questions

1. Did both trials result in convection currents forming? Why?.

(A) Yes, because of the temperature difference.

(B) Yes, because water always forms convection currents.

(C) No; when the hot water started at the bottom, it rose out to form convection currents. When the cold water was in the vial, it did not.

(D) No; when the cold water was in the vial, it rose out to form convection currents. When the hot water was in the vial, it did not.

(E) No, there was no movement at all.

2. What do you think is necessary for a convection current to form?.

(A) A constant heat source below, a cooler area on the top.

(B) A source of coolness on the top and bottom.

(C) A constant heat source on the top and bottom.

(D) The water must have the same temperature at the top and bottom.

3. What happens when cool and warm materials are mixed?.

(A) The cooler sinks, the warmer rises.

(B) The warmer sinks, the cooler rises.

(C) The mix equally; neither sinks or rises.

(D) Cool and warm stay permanently separated.

4. Imagine hotter magma lies beneath an area of cooler magma in the mantle. What would happen?.

(A) Hotter magma would rise, while cooler would sink, and then it would stop.

(B) A convection current would occur where hot magma rises, then cools near the surface and sinks, then is heated by the core and rises again.

(C) Nothing would happen.

(D) This is not possible.

5. What do scientists believe causes the plates to move?.

(A) Magnetism from the core.

(B) Convection currents in the asthenosphere due to temperature differences.

(C) Volcanoes due to hot magma from the mantle.

(D) Breaks in the Earth's crust caused by Continental Drift.

6. Explain in your own words why the plates move. Use the following words: convection, asthenosphere, core, mantle, tectonic plates, lithosphere.