

Brainpop—Plate Tectonics

Name:

Period:

Watch the Brainpop on plate tectonics, then fill out the sheet below. You can also use Chapter 9, Section 2 of your textbook to help you.

_____ 1. In the phrase, “Earth’s mantle is composed of molten rock,” what does **molten** mean?

- a. orange
- b. icy
- c. solid
- d. melted

_____ 2. If Earth was an apple, which part would be the crust?

- a. the core
- b. the seeds
- c. the skin
- d. the stem

_____ 3. What has to happen before rock from Earth’s mantle becomes a new piece of crust?

- a. it has to cool
- b. it has to heat up
- c. it has to drift
- d. it has to crack

_____ 4. Which term best describes the movement of continents?

- a. rapid
- b. gradual
- c. nonexistent
- d. quick

_____ 5. At convergent boundaries, one plate is sometimes subducted below another. What is the best definition of **subduction**?

- a. moving from side to side
- b. pulling apart
- c. pushing upward
- d. sliding under

_____ 6. Where would you be most likely to find a boundary between a continental & an oceanic plate?

- a. in the center of the Pacific Ocean
- b. in the center of North America
- c. off the west coast of North America
- d. at the boundary between Canada & U.S.A.

_____ 7. Which geological feature would you most likely find at a convergent boundary?

- a. a mountain range
- b. an island
- c. a desert
- d. a river

_____ 8. How is a transform boundary different from a convergent boundary?

- a. plates move apart at transform boundaries, and toward each other at convergent boundaries
- b. plates move underneath one another at transform boundaries, and over one another at convergent boundaries
- c. plates move toward each other at convergent boundaries, and side-to-side at transform boundaries
- d. continental drift does not occur along convergent boundaries, but it does occur at transform boundaries



Look at the map to the left. Why does Earth look different in this map?

Brainpop—Plate Tectonics

Name:

Period:

Which observations supported Alfred Wegener's theory of continental drift during his lifetime? Put a check-mark on each line that is in front of a correct statement. You may choose more than one answer:

- Shapes of continents resemble puzzle pieces.
- Volcanoes erupt frequently in Ring of Fire.
- Age of seafloor increases with distance from Mid-Atlantic Ridge.
- Similar fossils found in oceans apart.
- Similar rock layers found oceans apart.
- Himalayas continue to grow.

Fill in the blanks to complete the sentences. Use terms from the word bank below.

convection currents lithosphere rock cycle seafloor spreading sedimentary rock

Harry Hess proposed the idea of _____ to explain the formation of new rock at underwater ridges.

Intense heat at Earth's core creates _____ in the mantle, which leads to movement in the _____.

Plate tectonics drives the transformation of _____ into metamorphic and igneous rock during the _____.

Write the terms in the correct part of the diagram according to the type of plate boundary they describe.

high seismic activity Himalayas Mid-Atlantic Ridge plates collide
plates pull apart subduction zones

