

Directed Reading B (Lesson 7-3)

Section: The Theory of Plate Tectonics

Circle the letter of the best answer for each question.

1. What is the idea that tectonic plates move around called?
 - a. plate theory
 - b. tectonic theory
 - c. plate tectonics
 - d. convergent theory

TECTONIC PLATE BOUNDARIES

2. What is a place where tectonic plates touch called?
 - a. a separation
 - b. a collision
 - c. a division
 - d. a boundary

CONVERGENT BOUNDARIES

Read the description. Then, **draw a line** from the dot next to each description to the matching word.

- | | | |
|--|---|--|
| 3. boundary between tectonic plates that bump into each other | ● | |
| 4. boundary between tectonic plates that move away from each other | ● | a. transform boundary
b. convergent boundary
c. divergent boundary |
| 5. boundary between tectonic plates that slide past each other | ● | |

Directed Reading B *continued*

POSSIBLE CAUSES OF TECTONIC PLATE MOTION

Circle the letter of the best answer for each question.

6. What does thermal energy cause in rock?
- a. changes in density
 - b. changes in atmosphere
 - c. changes in Earth's core
 - d. changes in the oceans
7. What happens when rock is heated?
- a. Rock breaks.
 - b. Rock rises.
 - c. Rock sinks.
 - d. Rock becomes denser.
8. What happens when rock cools?
- a. Rock breaks.
 - b. Rock rises.
 - c. Rock sinks.
 - d. Rock becomes denser.

Read the description. Then, draw a line from the dot next to each description to the matching word.

- | | | |
|---|---|---------------|
| 9. edge of a tectonic plate sinks and pulls the rest with it | ● | a. ridge push |
| | | b. convection |
| 10. gravity makes the tectonic plate slide downhill | ● | c. slab pull |
| 11. heating and cooling of rocks makes a tectonic plate move sideways | ● | |

Directed Reading B *continued*

TRACKING TECTONIC PLATE MOTION

Circle the letter of the best answer for each question.

12. How is the movement of tectonic plates measured?
- a. in kilometers per year
 - b. in meters per year
 - c. in centimeters per year
 - d. in centimeters per day

The Global Positioning System

13. What do scientists use to measure tectonic plate movement?
- a. clinometers
 - b. the global positioning system
 - c. telescopes
 - d. seismographs