

## Skills Worksheet

**Directed Reading A****Section: The Theory of Plate Tectonics** (pp. 198–203)

Write the letter of the correct answer in the space provided.

- \_\_\_\_\_ 1. What is the name of the theory that Earth's lithosphere is divided into tectonic plates?
- a. plate theory
  - b. tectonic theory
  - c. plate tectonics
  - d. convergent theory

**TECTONIC PLATES**

- \_\_\_\_\_ 2. What are large pieces of the lithosphere that move around on top of the asthenosphere called?
- a. mantle pieces
  - b. crust plates
  - c. tectonic plates
  - d. puzzle pieces

**A Tectonic Plate Close-Up**

- \_\_\_\_\_ 3. How do tectonic plates fit together?
- a. like a layer cake
  - b. like a jigsaw puzzle
  - c. like a stack of books
  - d. like a model car
- \_\_\_\_\_ 4. Which of the following is the thickest part of the South American plate?
- a. the part underneath the continental crust
  - b. the oceanic crust
  - c. the mantle
  - d. the mid-Atlantic Ocean

**Like Ice Cubes in a Bowl of Punch**

- \_\_\_\_\_ 5. How are tectonic plates like ice cubes in a bowl of punch?
- a. Tectonic plates move around and touch each other.
  - b. Tectonic plates melt and become liquid.
  - c. Tectonic plates sink and disappear from the surface.
  - d. Tectonic plates freeze and become harder.

**Directed Reading A *continued*****TECTONIC PLATE BOUNDARIES**

- \_\_\_\_\_ 6. What is a place where tectonic plates touch called?
- a. a separation
  - b. a collision
  - c. a division
  - d. a boundary

**Convergent Boundaries**

- \_\_\_\_\_ 7. What is it called when the denser of two tectonic plates sinks beneath the less dense plate after they collide?
- a. abduction
  - b. subduction
  - c. deduction
  - d. collision
- \_\_\_\_\_ 8. What is a series of volcanic islands called?
- a. island arc
  - b. island arch
  - c. volcanic arc
  - d. volcanic ash

**Divergent Boundaries**

- \_\_\_\_\_ 9. Where do most divergent boundaries happen?
- a. in Iceland
  - b. in East Africa
  - c. on land
  - d. on the sea floor

**Transform Boundaries**

- \_\_\_\_\_ 10. The San Andreas fault system in California is a well-known example of what kind of boundary?
- a. convergent boundary
  - b. divergent boundary
  - c. transform boundary
  - d. convergent and transform boundaries

**Directed Reading A *continued***

- \_\_\_\_\_ 11. Where is the San Andreas fault system located?
- a. where the Pacific and the North American plates are sliding past each other
  - b. where the Atlantic and the North American plates are sliding past each other
  - c. where the Pacific and the South American plates are sliding past each other
  - d. where the Atlantic and the South American plates are sliding past each other

**Match the correct description with the correct term. Write the letter in the space provided.**

- |   |                        |
|---|------------------------|
| _____ 12. boundary at which two tectonic plates collide                             | a. transform boundary  |
| _____ 13. boundary at which two tectonic plates separate                            | b. convergent boundary |
| _____ 14. boundary at which two tectonic plates slide past one another horizontally | c. divergent boundary  |

**CAUSES OF TECTONIC PLATE MOTION**

**Write the letter of the correct answer in the space provided.**

- \_\_\_\_\_ 15. What causes the motion of tectonic plates?
- a. differences in density
  - b. changes in atmosphere
  - c. changes in Earth's core
  - d. changes in the oceans
- \_\_\_\_\_ 16. What happens when rock is heated?
- a. Rock breaks.
  - b. Rock rises toward Earth's surface.
  - c. Rock sinks.
  - d. Rock becomes denser.
- \_\_\_\_\_ 17. What happens when rock cools?
- a. Rock breaks.
  - b. Rock rises toward Earth's surface.
  - c. Rock sinks.
  - d. Rock becomes denser.



**Directed Reading A** *continued*

**Match the correct description with the correct term. Write the letter in the space provided.**

- |   |                      |
|---|----------------------|
| _____ 18. The edge of a tectonic plate sinks and pulls the rest of the plate with it. | <b>a.</b> ridge push |
| _____ 19. Gravity makes the tectonic plate slide downhill.                            | <b>b.</b> convection |
| _____ 20. Heating and cooling of rocks make a tectonic plate move sideways.           | <b>c.</b> slab pull  |

**TRACKING TECTONIC PLATE MOTION**

**Write the letter of the correct answer in the space provided.**

- \_\_\_\_\_ 21. 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
- \_\_\_\_\_ 22. What do scientists use to measure tectonic plate movement on continents?
- a.** clinometers
  - b.** global positioning system (GPS)
  - c.** telescopes
  - d.** seismometers
- \_\_\_\_\_ 23. What do scientists use to measure the rate of movement of oceanic plates?
- a.** sea-floor spreading
  - b.** global positioning system (GPS)
  - c.** seismometers
  - d.** magnetic reversal