



Directed Reading for
Content Mastery

Key Terms Plate Tectonics

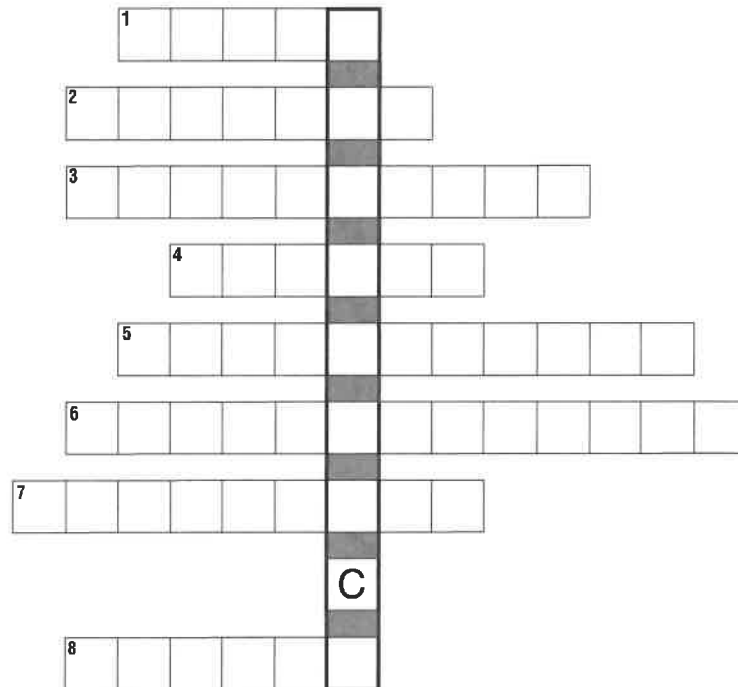
Directions: Use the following terms to complete the puzzle below. The letters in the darker, vertical box complete question 9.

Pangaea
convection

mantle
plates

spreading
drift

lithosphere
asthenosphere



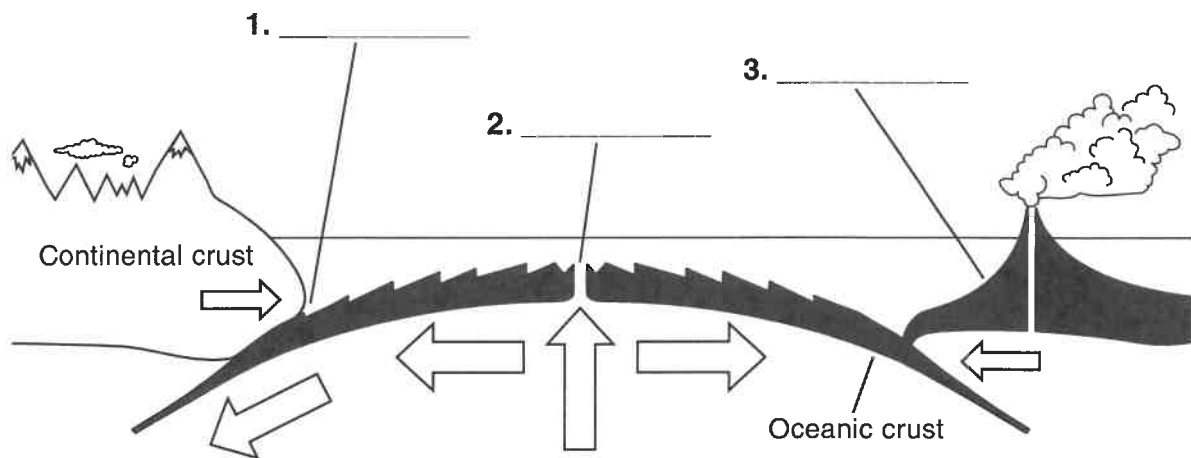
1. The hypothesis that continents move slowly is called continental _____.
2. All continents once might have been connected in a large landmass called _____.
3. The cycle of heating, rising, cooling, and sinking is a _____ current.
4. Just below Earth's crust is the _____.
5. The crust and part of the upper mantle are known as the _____.
6. Continental plates move on the plasticlike layer of Earth's surface called the _____.
7. Hot magma forced upward at mid-ocean ridges produces seafloor _____.
8. Sections of Earth's crust and part of the upper mantle are called _____.
9. The theory that Earth's crust and upper mantle are in sections that move is called plate _____.



Overview Plate Tectonics

Directions: Study the following diagram. Then label each part with the letter of the correct description below.

- A. A mid-ocean ridge forms whenever diverging plates continue to separate, creating a new ocean basin. As the rising magma cools, it forms new ocean crust.
- B. When an oceanic plate converges with a less dense continental plate, the denser oceanic plate sinks under the continental plate.
- C. When two oceanic plates converge, the denser plate is forced beneath the other plate and volcanic islands form above the sinking plate.



Directions: Circle the words in parentheses that best complete the sentences below.

- 4. (Fossils, Human bones), rocks, and climate provided Wegener with support for his continental drift theory.
- 5. The fact that the (youngest, oldest) rocks are located at the mid-ocean ridges is evidence for seafloor spreading.
- 6. The transfer of (solar, heat) energy inside Earth moves plates.

SECTION 3

Reinforcement

Theory of Plate Tectonics

Directions: Use the following words to fill in the blanks below.

asthenosphere

lithosphere


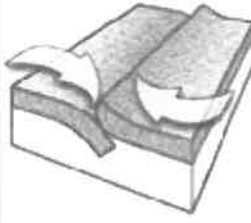
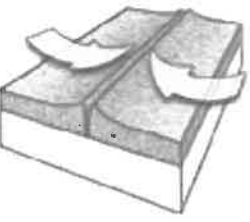
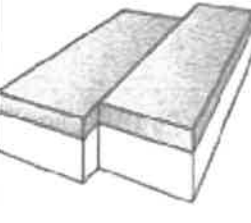
plate tectonics

convection

plates

- The theory of _____ states that Earth's crust and upper mantle are broken into sections.
- These sections, called _____, are composed of the crust and a part of the upper mantle.
- The crust and upper mantle together are called the _____.
- Beneath this layer is the plasticlike _____.
- Scientists suggest that differences in density cause hot, plasticlike rock to be forced upward toward the surface, cool, and sink. This cycle is called a _____ current.

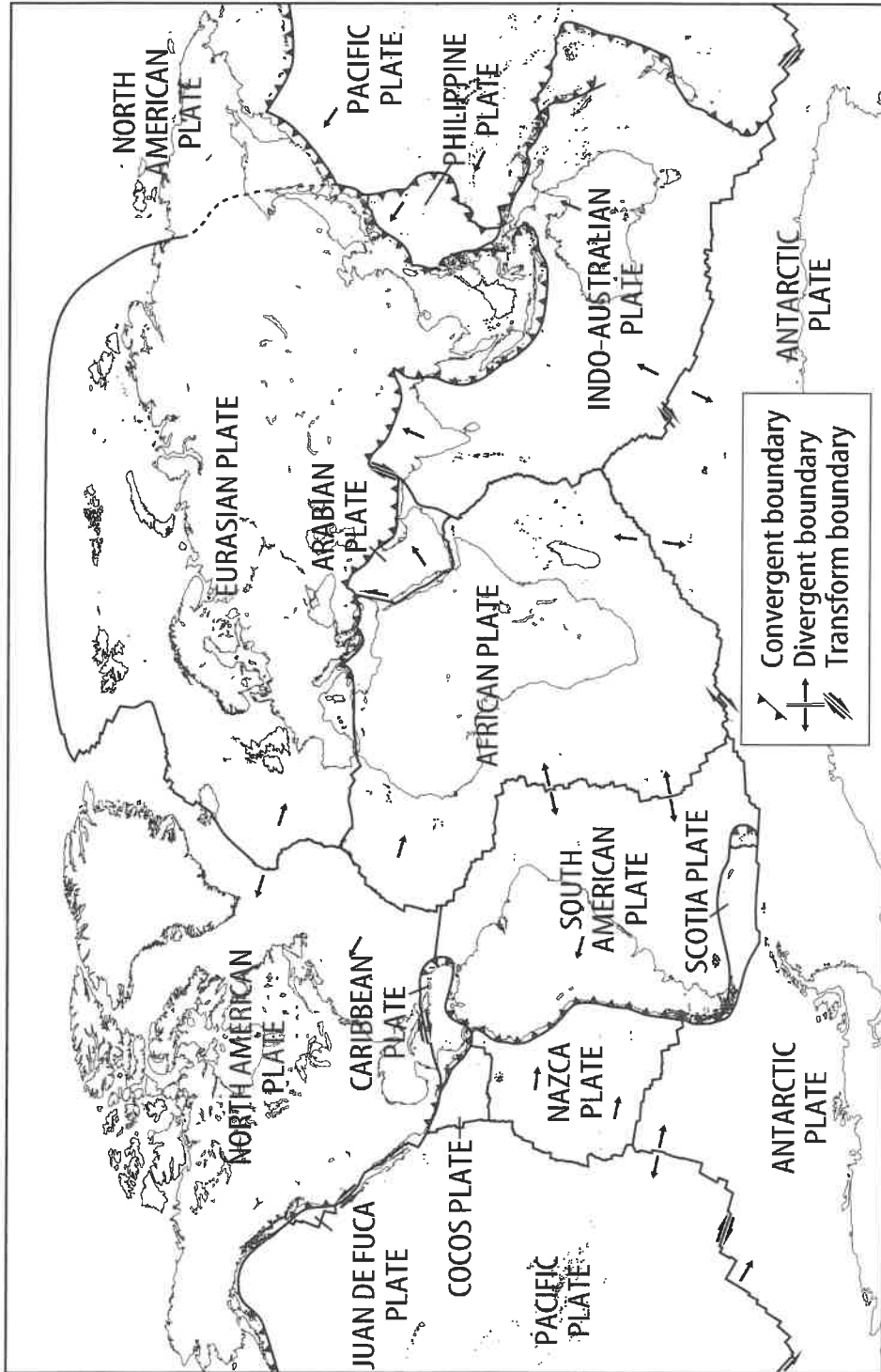
Directions: Four diagrams are shown in the table below. Label and describe each diagram in the space provided in order to complete the table.

Diagram	Type of boundary and motion at boundary	Diagram	Type of boundary and motion at boundary
6. 		8. 	
7. 		9. 	

SECTION
3

Teaching Transparency
Activity

Plates of the
Lithosphere



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