

Chapter 9 Plate Tectonics

Section 9.3 Actions at Plate Boundaries

This section discusses seafloor spreading, subduction zone, and transform fault boundaries.

Reading Strategy

Outlining Complete the outline. Use the green headings as the main topics and the blue headings as subtopics. As you read, add supporting details. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Actions at Boundaries	
I. Divergent Boundaries	
A. _____	
B. _____	
II. _____	
A. _____	
B. _____	
C. _____	
III. _____	

Divergent Boundaries

1. Is the following sentence true or false? Oceanic lithosphere is created at divergent boundaries. _____
2. Is the following sentence true or false? Divergent boundaries only occur on the ocean floor. _____

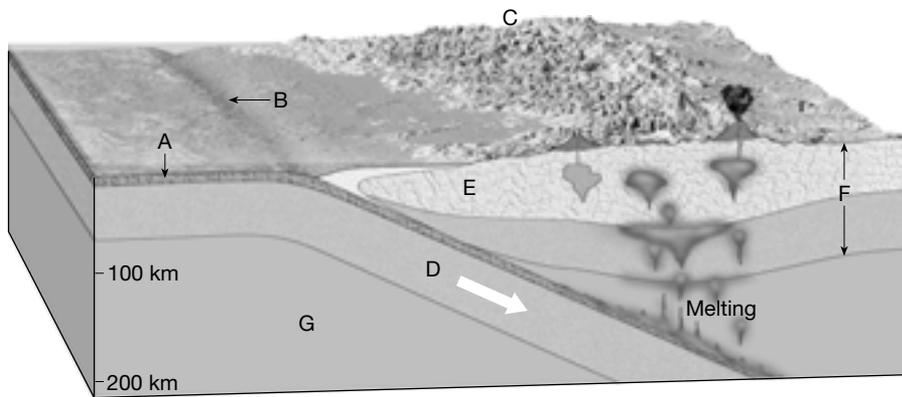
Match each definition with its term.

- | | Definition | Term |
|----------|--|---|
| _____ 3. | 👁️ process by which plate tectonics produces new oceanic lithosphere | a. seafloor spreading
b. rift valley
c. oceanic ridge |
| _____ 4. | deep faulted structure found along a divergent boundary | |
| _____ 5. | elevated seafloor along a divergent boundary | |
| 6. | Circle the letter of the age of the oldest parts of the ocean floor. | |
| | a. 18 million years old | |
| | b. 80 million years old | |
| | c. 180 million years old | |
| | d. 180 billion years old | |

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Convergent Boundaries

7. Select the appropriate letter in the figure that identifies each of the following features.



- _____ Sinking oceanic lithosphere
- _____ Oceanic crust
- _____ Trench
- _____ Continental volcanic arc
- _____ Continental lithosphere
- _____ Continental crust
- _____ Asthenosphere

8. Circle the letter of the description of a subduction zone.

- a. where an oceanic plate is forced beneath a second plate
- b. where an oceanic plate grinds past a second plate
- c. where a continental plate grinds past a second plate
- d. where an oceanic plate moves away from a second plate

9. Newly formed land consisting of an arc-shaped island chain is called a(n) _____.

10. Is the following sentence true or false? Mountains form as a result of a collision between two continental plates.

Transform Fault Boundaries

11. What happens at a transform fault boundary? _____

12. Circle the letter of the example of a transform fault boundary that is NOT located in an ocean basin.

- a. the San Andreas Fault
- b. the Aleutian Trench
- c. the Himalayan mountains
- d. the Nazca plate