The Theory of Plate Tectonics

Introduction (p. 158)

1. The lithosphere is broken into separate sections called ______________.

2. Is the following sentence true or false? Plates can carry continents or parts of the ocean floor but not both. ______________

How Plates Move (p. 159)

3. State the theory of plate tectonics.

4. Is the following sentence true or false? The theory of plate tectonics explains the formation, movement, and subduction of Earth’s plates. ______________

Plate Boundaries (pp. 160–162)

Match the term with its definition.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. _____ plate boundary</td>
<td>a. Deep valley that forms where two plates pull apart</td>
</tr>
<tr>
<td>6. _____ fault</td>
<td>b. Line where the edges of Earth’s plates meet</td>
</tr>
<tr>
<td>7. _____ rift valley</td>
<td>c. Break in Earth’s crust where rocks have slipped past each other</td>
</tr>
</tbody>
</table>
8. How are the movement of plates at divergent boundaries and at sliding boundaries similar?

________________________________________________________________________
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9. Is the following sentence true or false? Crust is neither created nor destroyed along a sliding boundary. ________________

10. Most spreading boundaries occur along ________________.

11. When two plates collide, what determines which plate comes out on top?

________________________________________________________________________

Mark (T) true or (F) false about colliding boundaries for questions 12 to 15.

12. _____ Where two plates carrying oceanic crust meet, subduction does not take place.

13. _____ An oceanic plate sinks beneath a continental plate when the two plates collide.

14. _____ Where two plates meet, the one that is more dense sinks under the other.

15. _____ Mountain ranges form where two plates carrying continental crust collide.

16. Was Pangaea the only supercontinent to have existed? Explain your answer.

________________________________________________________________________
________________________________________________________________________

17. Is the following sentence true or false? The pieces of the supercontinent Pangaea began to drift apart about 225 million years ago. ________________