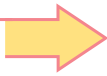




**T**he map below shows the locations of earthquakes and volcanoes on the earth's surface. Today, many of the world's most active volcanoes are located around the edges of the Pacific Ocean, and are often referred to as the "Ring of Fire." You may notice that both volcanoes and earthquakes tend to be concentrated in particular areas. The theory of plate tectonics helps explain this pattern.

### CHALLENGE



How does the theory of plate tectonics help to explain the locations of earthquakes, volcanoes, and mountain ranges?

### MATERIALS



For each student

- 1 completed Student Sheet 44.2, "Plate Boundaries"
- 1 Student Sheet 45.1, "Directed Reading Table: Understanding Plate Boundaries"

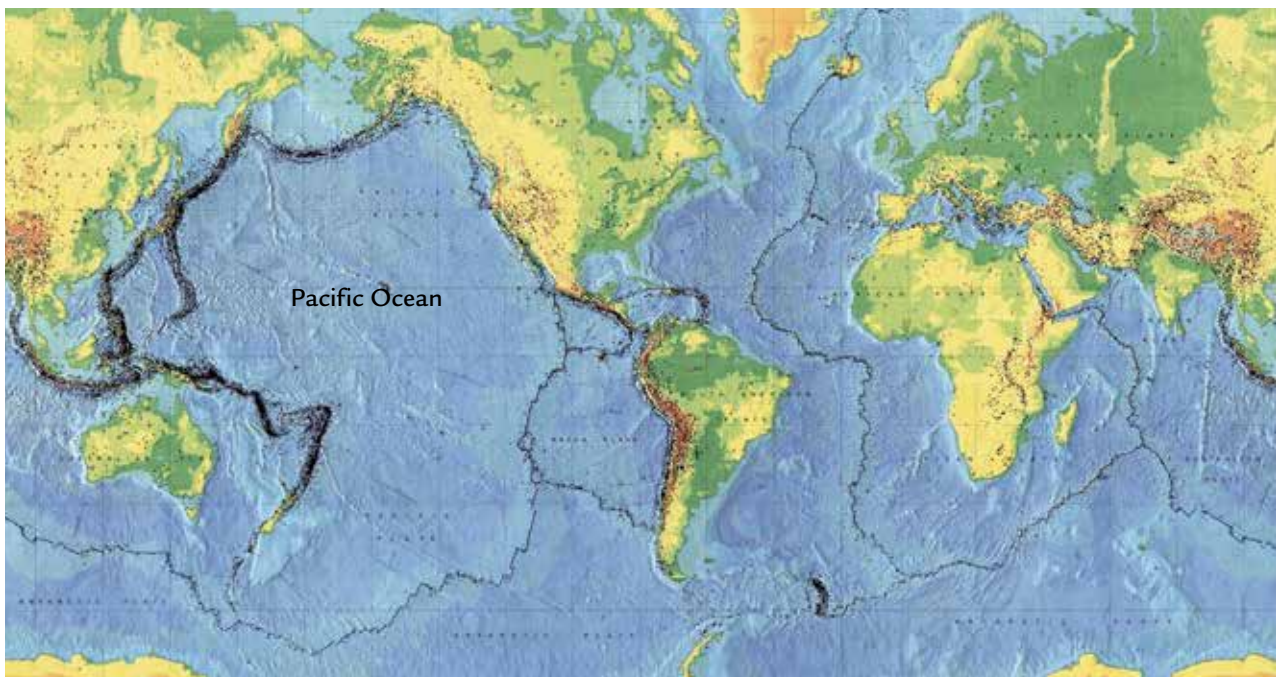


FIGURE 1: MAP OF RECENT EARTHQUAKES AND VOLCANOES ON EARTH

*Black dots mark the locations of individual earthquakes and volcanoes.*