

42 The Theory of Plate Tectonics



In Activity 40, “The Continent Puzzle,” you investigated the movement of continents. Today, geologists know that it’s not just the continents that move—it is the entire surface of the earth! The earth’s surface is broken into large sections called **plates**. These plates not only include the surface of the earth, but also extend down into the solid part of the upper mantle. This is one reason that geologists use the term “lithosphere.” The movement of these lithospheric plates is called **plate tectonics** (tek-TAWN-iks).



How did continental drift lead to the theory of plate tectonics?

MATERIALS



For each student

- 1 Student Sheet 42.1, “Plate Tectonics Video”

Divers examine an underwater volcanic vent.

