late Tectonics 12

for Reading

u read the following
s, you will be able to

arth's Drifting Continents

Describe the evidence for the theory of continental drift.

arth's Spreading Ocean oor

Relate ocean-floor spreading to continental drift.

arth's Moving Plates

Discuss the theory of plate tectonics.

Have you ever looked at a globe or world map and noticed that the Earth's landmasses resemble pieces of a giant jigsaw puzzle? For example, the east coast of South America matches up with the west coast of Africa. The Arabian Peninsula and the northeast coast of Africa also seem to fit together.

Since the 1600s, people have wondered why the Earth's landmasses look like they would fit together. Were they connected at one time? If so, how were they moved apart?

In time, new discoveries caused other questions about the Earth to be asked. Why do places far from one another and with different climates have the remains of the same types of ancient organisms? Why do mountains and valleys form where they do? Why do earthquakes and volcanoes occur in the same areas over and over again?

For many years, no one came up with a theory that provided satisfactory answers. Then in 1915, a young German scientist published a radical, extremely controversial new theory. Read on, and discover more about the development of a theory that put the pieces of the puzzle together and revealed a better picture of the dynamic planet on which we live.

Journal *Activity*

You and Your World Have you ever been in a situation in which you knew you were right, but no one would listen to you? In your journal, describe the situation and how it made you feel.

tograph taken from space shows that the Arabian Peninsula (top) and tern Africa (bottom) look as if they are two pieces of a giant puzzle.