

How Plates Affect Our Planet: Plates on the Move

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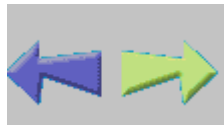
Illustrations by Eric Hamilton

Look around you. It may seem that the earth is perfectly still. But the earth's outer shell, or surface, is actually moving all the time.

The earth's thin outer shell is broken into big pieces called tectonic plates. These plates fit together like a puzzle, but they're not stuck in one place. They are floating on the earth's mantle, a really thick layer of hot flowing rock. The flow of the mantle causes the plates to move in different directions. When the edges of plates meet, four things can happen:



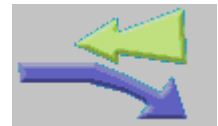
Slip: two plates slide past each other



Spreading: two plates move apart from each other



Collision: two plates crash and fold up



Subduction: one plate sinks below the other

Even though plates move very slowly, their motion, called plate tectonics, has a huge impact on the earth. Plate tectonics form the oceans, continents, and mountains. It also helps us understand why and where events like earthquakes occur and volcanoes erupt.