Learning Set 3

What Happens at Plate Boundaries?

The rocky plates making up the surface of Earth fit together like pieces of broken shell on a boiled egg. The breaks between the plates are areas where parts of the crust can move. Geologic activity resulting from these movements is often visible at the surface but occurs throughout the depths of the crust as well. In this Learning Set, you will investigate one type of geologic activity that happens where plates meet—earthquakes.

By investigating earthquakes in your region—what causes them, what happens during an earthquake, and how scientists determine where earthquakes have occurred—you will be able to identify where plates are interacting with each other in your area.

Investigating earthquakes and identifying where plates are interacting will help you understand the following:

- the geologic activity in your region;
- patterns of geologic activity across regions;
- what is happening within Earth that causes geologic activity.

After investigating earthquakes, you will use what you have learned to make your first predictions about where Earth’s plates meet and interact. You will then use this information as you move forward, answering the Big Question for this Unit, What processes within Earth cause geologic activity?