

Plate Tectonic Cycle •



Earth's Moving Force

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| Volcanoes (1 week) | Volcanoes Produce Rocks | Volcanoes have Definite Shapes | Products of Volcanoes | Creating Rocks from Lava | 3 Basic Types of Volcanoes | Volcanoes produce Different Rocks | Location of Volcanoes |
| Earthquakes (1 week) | Shaking during an Earthquake | Earthquakes Release Energy | Earthquake Faults | Seismic Waves cause Damage | Measuring Earthquake Intensities | Wave Movements and Seismograms | Dividing the Earth by Waves |
| Plate Tectonics (1 week) | Continents and Oceans | Moving Continents | Evidence from Continents | Pressure in the Earth | Diverging, Converging, Transform Boundaries | Crustal Movement | Definition of Plate Boundaries |
| Hazards (1 week) | Earthquakes and Volcanoes cause Damage | Volcanic Eruptions | Where of you go for Help? | Historical Damage (Volcanoes) | Damage during Earthquakes | Mudslides and Volcanoes | "Earthquake Proof" Structures |

Plate Tectonics Cycle at a Glance

In the Plate Tectonic Cycle, students learn about the Earth's dynamics as it spins on its axis, revolving around the Sun. The Earth is restless inside, as it tries to cool its interior. Material inside the Earth become viscous and flow in certain areas. Movement within the Earth's interior is reflected on the outside crust. Convection currents inside the mantle (area between the crust and the outer core) create 2 types ofcrustal movements. When convections currents come together, convergent plate boundaries (earthquakes) are formed on the Earth's crust. When the convection currents pull the crust apart in two different directions divergent plate boundaries (volcanoes and earthquakes) are formed. A consequence of the Earth's surface moving faster along the equator than at the poles creates tension which in part forms transform boundaries.

In the Classroom

Hands-on activities teach students how scientists investigate the Earth through earthquakes and volcanoes. They learn to challenge and think about different theories. Learning about how to cope with the disasters caused by plate tectonics is also emphasized.