

## Investigation 4: The Movements of the Earth's Lithospheric Plates

# This investigation will help you to:

- The Earth's Lithosphere
- Lithospheric Plates
- Subduction
- Continent-Continent Collision

To learn more about Earth's lithosphere, visit the following web sites:

Mechanical properties - 'lithosphere' and 'asthenosphere', **The Geological Society of London**

This article addresses the differences in terminology between crust and mantle versus lithosphere and asthenosphere.

What on Earth is Plate Tectonics?, **USGS**

Check out this page that offers brief descriptions about the Earth's interior for beginners and links to more detailed information for those more curious.

To learn more about lithospheric plates, visit the following web sites:

Plate Tectonic Animations, **USGS**

See several different animations of Earth processes. Each animation comes with a short sentence description.

To learn more about subduction, visit the following web sites:

Rocks Form Where Plates Collide, **USGS**

Find out where igneous, metamorphic, and sedimentary rocks form in a collision zone between oceanic crust and continental crust.

How to Build a Model Illustrating Sea-Floor Spreading and Subduction, **USGS**

This report describes how to build a model of the outer 300 km (180 miles) of the Earth that can be used to develop a better understanding of the principal features of plate tectonics, including sea-floor spreading, the pattern of magnetic stripes frozen into the sea floor, transform faulting, thrust faulting, subduction, and volcanism.

To learn more about continent-continent collision, visit the following web sites:

Birth of the Himalaya, **NOVA Online**

This site accompanies the NOVA special called Everest and includes some background information on continent-continent collisions.

Geomorphology from Space, **NASA**

NASA devotes a page to the Himalayan Front and Tibetan Plateau within the online book, *Geomorphology from Space - A General Overview of Regional Landforms*. The technical descriptions annotate a series of photographs of different parts of the Himalayan range.

The Earth's Crust, **USGS**

Where is the Earth's crust the thickest? Where is it the thinnest? This map shows the crustal thickness around the globe.

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