Puzzling Plates



We live on a layer of Earth, the lithosphere, which is a collection of rigid slabs that are shifting and sliding into each other. These slabs are called *tectonic plates* and fit together like pieces to a puzzle. The shifts and movements of these plates is what helps shape our landscape by forming mountain ranges, transforming the ocean floor, and shaping lands near plate boundaries.

Before starting this activity the learner should familiarize themselves with the more common plate names (listed in the box to the right) and their location on the plate tectonic map. This map is similar, but not identical, to the plate tectonic map

that each student will complete. Helpful information on plate tectonics can be found in the USGS Publication *This Dynamic Earth: the story of Plate Tectonics* (<u>http://pubs.usgs.gov/gip/dynamic/dynamic.html</u>).

Materials:

- Glue stick or tape
- Plain piece of construction paper
- Scissors
- Plate Tectonic Reference Map

Directions:

- 1. Look at the plate tectonic reference map and familiarize yourself with the location of the continents and what plates are associated with these continents. See what types of plate boundaries are at the different plates.
- 2. Cut out the puzzle pieces on pages 3 & 4. *Cutting as accurately as possible helps the pieces fit together better*.
- 3. On the plain construction paper begin to assemble the 15 puzzle pieces to create the tectonic plate map. Glue or tape the pieces down only when you are certain it is complete.
- 4. Label each plate according to the names in the box at the top of this page. Be sure to spell them correctly!

Plate Names

African	Juan De Fuca
Antarctic	Nazca
Arabian	North American
Australian	Pacific
Caribbean	Philippine
Cocos	Scotia
Eurasian	South American
Indian	

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