

TRANSFORM  
 DIVERGENCE  
 CONVERGENCE  
**PLATE BOUNDARY**  
 Converging  
 Diverging  
 Transform

This map highlights the Earth's tectonic plate boundaries. The individual tectonic plates are labeled in white lettering. Arrows indicate the direction of plate motion at many of the plate boundaries, and the rate of motion is shown in millimeters per year. Most plates are moving tens of millimeters per year – about the same rate that your fingernails grow.

- Divergent Boundaries:** Divergent boundaries are formed where plates are being split apart and are moving away from one another. Most divergent boundaries are mid-ocean spreading ridges or continental rift zones. New crust is formed along the mid-ocean spreading ridges, filling the gaps left behind as the plates move. The mid-Atlantic spreading ridge comes on land at Iceland and is splitting the island nation in two. On a larger scale, the mid-Atlantic spreading ridge is pushing the landmasses of Africa and Eurasia away from North and South America.
- Convergent Boundaries:** Since the Earth is not growing larger, the production of new crust at mid-ocean ridges must be balanced by consumption of crust elsewhere. This can be seen at the convergent boundaries, which are found in areas where plates move towards one another. Most convergent boundaries are associated either with subduction zones or with mountain ranges. At the convergent boundary between the Pacific Plate and the South America Plate, oceanic crust is being consumed - subducted under continental crust. At the convergent boundary between the India Plate and the Eurasia Plate, the collision of two continental landmasses is building up the Himalayan Mountains.

# TECTONIC PLATES

## Divergent, Convergent, and Transform Boundaries

- Transform Boundaries:** Transform boundaries are found in areas where plates are sliding past one another. Even though the mid-ocean spreading ridges are predominantly divergent boundaries, they are broken into small divergent segments connected to one another by short transform faults. On the continents, two of the largest and best-known transform plate boundaries are the San Andreas Fault Zone in California and the North Anatolian Fault Zone in Turkey.

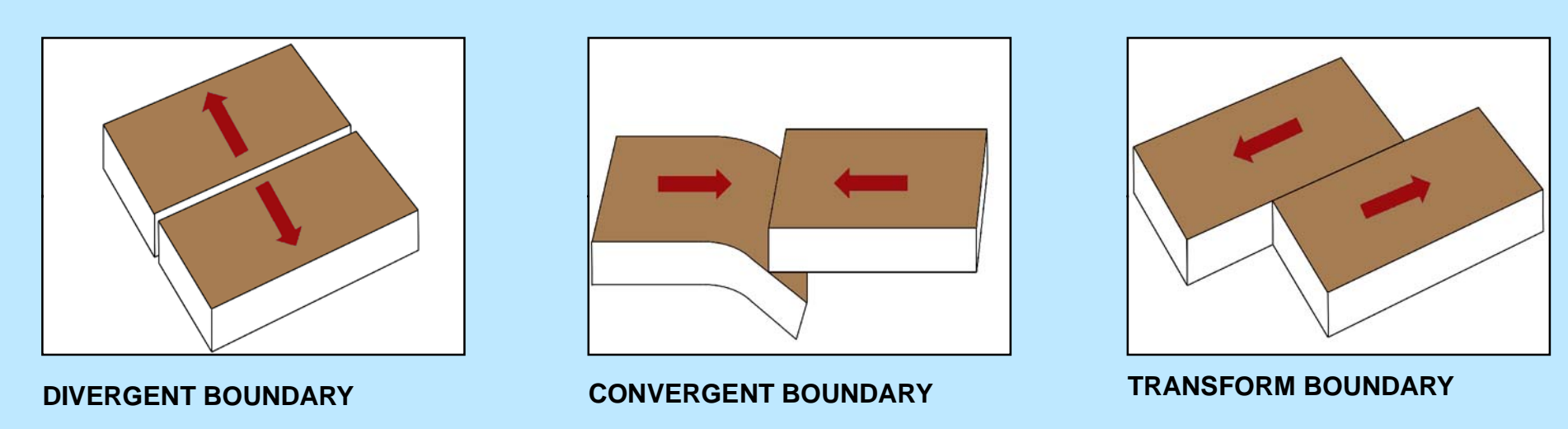


Plate Boundary - Referenced from Bird, Peter (2003) An updated digital model of plate boundaries. (Oregon boundaries omitted).  
 Plate Convergence Vectors - Referenced from United States Geological Survey: Convergence data are shown by arrows describing direction and speed, relative to the plate across the boundary.  
 Plate Divergence Vectors - Referenced from Digital Tectonic Activity Map: Divergence data are shown by double arrows describing direction and speed.  
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