



Vocabulary: Plate Tectonics



Vocabulary

- **Asthenosphere** – a layer of the upper mantle in which rocks can deform like plastic.
 - While the rock of the asthenosphere is almost solid, over long periods of time it can move like a liquid.
 - The asthenosphere is thought to contain convection currents that help to move the plates.
- **Collision zone** – an area in a convergent boundary where two continents are colliding.
 - Due to its low density, continental lithosphere is usually not subducted. As a result, high mountains often form in these locations.
 - The Himalayas were formed by a collision between India and Eurasia.
- **Convergent boundary** – a boundary between plates that are moving toward each other.
 - Convergent boundaries include collision zones and subduction zones.
- **Crust** – the rocky outer layer of Earth.
 - Oceanic crust is about 10 km thick, while continental crust is up to 50 km thick.
- **Divergent boundary** – a boundary between plates that are moving away from each other.
 - New crust is created in a divergent boundary.
 - Divergent boundaries on the ocean floor result in long mountain ranges called mid-ocean ridges.
- **Earthquake** – shaking and vibration of Earth's surface.
 - Most earthquakes are caused by the sudden movement of plates along plate boundaries.
- **Lithosphere** – the rigid upper layer of the Earth.
 - The lithosphere consists of the crust and the upper part of the mantle.
- **Mantle** – the layer of Earth between the crust and the core.
 - The mantle extends from 2,900 km below Earth's surface to the base of the crust. It is the largest of Earth's layers.
 - The mantle is composed of solid and partially molten rock that is rich in magnesium and iron.
- **Plate** – a rigid section of Earth's crust that moves very slowly.
 - Earth's crust is divided into approximately 15 plates.



- Plate tectonics – the movement of plates that make up Earth’s surface.
- Subduction zone – a convergent boundary where one plate is sliding beneath another.
 - A subduction zone usually occurs when at least one of the converging plates is composed of dense oceanic lithosphere. In this case, the plate with the denser lithosphere subducts, or sinks below, the other plate.
- Transform boundary – a boundary between plates that are sliding past one another.
- Volcano – an opening in Earth’s crust from which lava, gas, and ash erupt.
 - Often the erupted material will form a mountain.

