

# Glossary

## Unit 10.1

**Asthenosphere:** a layer of 'plastic' semi-solid rock in the lower mantle

**Continental drift:** the separating of continents by drifting across the oceans

**Magnetic striping:** patterns of magnetism trapped in rocks on each side of plate boundaries

**Ocean trench:** a deep trench in the ocean floor that is much deeper than the rest of the ocean floor

**Plate tectonics:** the theory that the Earth's crust is cracked into many large pieces that move on the asthenosphere

**Rifting:** the process of continents breaking up, subsiding and allowing in the sea

**Seafloor spreading:** the process of new crust forming at the ocean ridges and spreading outwards

**Subduction:** where the crust is sinking down into the Earth



Continental drift

## Unit 10.2

**Continental crust:** the crust that forms the continents

**Converging boundary:** where plates are colliding with each other

**Diverging boundary:** where plates are moving apart from each other in opposite directions

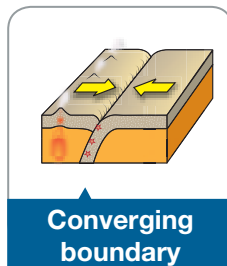
**GPS ground station:** a receiver and computer that can detect satellite signals and calculate its position on the Earth's surface

**Island arc:** a chain of islands formed at the edges of colliding tectonic plates where one plate subducts

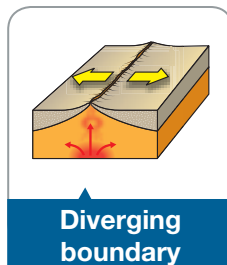
**Oceanic crust:** the crust that forms the ocean floor

**Subduction:** when oceanic crust collides with continental crust, and the oceanic plate then sinks below the continental plate

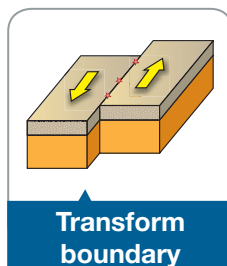
**Transform boundary:** where plates are sliding parallel to each other but in opposite directions



Converging boundary



Diverging boundary



Transform boundary

## Unit 10.3

**Earthquake:** the rapid movement of the ground, usually back and forth and up and down in a wave motion due to the movement of tectonic plates

**Epicentre:** the point on the Earth's surface directly above the focus of an earthquake

**Focus:** the place below ground where an earthquake starts

**Hot spots:** isolated places away from plate boundaries where a lot of hot magma is being created

**Lava:** molten rock that has erupted onto the Earth's surface

**Magma:** molten rock below the Earth's surface

**Primary wave (P-wave):** a longitudinal seismic wave that travels fast through the Earth

**Pyroclastic flow:** a cloud of ash, rock and gas at about 500°C that exits from a volcano like an avalanche

**Secondary wave (S-wave):** a transverse seismic wave that travels through the Earth

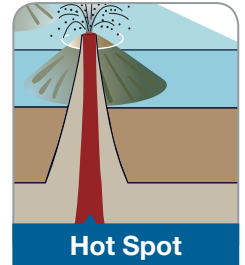
**Seismic wave:** the shaking, wave-like movement of the ground in an earthquake

**Seismometer:** an instrument that detects the seismic waves from an earthquake

**Surface wave:** a seismic wave that travels along the surface of the Earth in the crust

**Tsunami:** a huge wave in the ocean caused by an earthquake occurring on the seafloor

**Volcano:** a place where extremely hot material from inside the Earth erupts at the surface



Hot Spot



Tsunami



Volcano

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