

Earth's Structure: What causes Earth's tectonic plates to move? (from the inside out)

**Word Bank**

- cool
- convection currents
- convection currents
- core
- geologic activity
- heat
- heats
- hottest
- inner
- lower
- lower
- rise
- sinks

- ① Inner \_\_\_\_\_ is \_\_\_\_\_ layer.
- ② The heat from inner core is transferred to \_\_\_\_\_ core.
- ③ \_\_\_\_\_ goes to \_\_\_\_\_ mantle.
- ④ As lower mantle \_\_\_\_\_ up; material begins to \_\_\_\_\_.
- ⑤ When mantle material gets to top, it begins to \_\_\_\_\_ down.
- ⑥ Cooler mantle material \_\_\_\_\_ back down to \_\_\_\_\_ mantle.
- ⑦ This process is \_\_\_\_\_.
- ⑧ \_\_\_\_\_ cause plates to \_\_\_\_\_.
- ⑨ Plates move cause \_\_\_\_\_.

Boundary Types	Sketch	Description
Convergent		plates _____ together
Buckling		plates converge causing them to _____ up
Subduction		oceanic plates _____ under continental plate
Divergent		plates _____
Hot Spot		_____ bursts through _____ crust creating volcanoes
Transform		plates _____ past each other

Region	Boundary Type	Crust Type	Geologic Activity
Java Trench	_____ (subduction)	_____ - continental	EQs, _____, tsunami, _____
Baja Peninsula	_____	oceanic - _____	_____, volcanoes mountains
Hawaiian Islands	_____ _____	_____	_____, EQs (islands)
Iceland	_____	_____ - oceanic	volcanoes (shield/strato) _____, hot springs, EQ
Mt Everest	_____ (buckling)	continental - _____	_____, avalanches, EQs
Mt Fuji	convergent (_____)	oceanic - _____	volcanoes (____), _____, tsunami islands
Mt Aconcagua	_____ (subduction)	_____ - continental	_____ and volcanoes
Mt Popocatepetl	_____ (subduction)	oceanic - _____	_____ and volcanoes (strato)
Mt Kilimanjaro	_____ (rift zone)	_____	volcanoes, _____ _____ valley