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| Convergent Continental-Continental Plates |  | Continental Plates |
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| Convergent Oceanic-Oceanic Plates |  | Oceanic Plates |
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| Convergent Oceanic-Continental Plates |  | Earthquakes and fault zones |
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| Transform Boundaries |  | Volcanoes |
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| Oceanic-Oceanic Divergent Boundary |  | Mountains |
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| Continental-Continental Divergent Boundary |  | Convection Currents in the Mantle |
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| This type of crust is typically less dense but also thicker, so it floats higher in the liquid rock of the mantle to form large land masses. It does not subduct easily. |  | These are plates that are moving into each other. Since they are of equal density, typically the rock where they meet becomes highly stressed, compressed, and deformed. The resulting uplift can cause a mountain range to form over time on continental landmasses. |
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| This type of crust is typically more dense and thinner, so it floats lower or deeper in the liquid rock of the mantle to form the floors of oceans. It is heavier, so it tends to subduct more easily. |  | These are plates that are moving into each other. Since they are of equal density, typically the rock where they meet becomes highly stressed, compressed, and deformed. The resulting uplift can cause an underwater mountain range to form over time. |
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| These occur in areas where tectonic plates and the rocks they contain are put under stress by compression, tension, and shear. When the rocks break or slip under the stress, energy is released as vibrations that move through the earth. |  | These are plates that are moving into each other. Since the oceanic plate is denser, it tends to subduct beneath the continental plate. The groove where the plate dives into the mantle is called a trench. Water carried into the mantle helps the subducting plate to melt and rise to the surface to form a volcano. |
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| These tend to form in areas where magma is close to the surface, either over hotspots or where oceanic plates are subducting and trapping water that allows the rock to liquefy and resurface. |  | These are tectonic plate boundaries where plates are sliding past each other. If they get stuck, rock can become stressed, leading to Earthquakes when the energy from the stress is released. |
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| These landforms are caused by uplift when tectonic plates of similar density converge. Since they cannot subduct easily, compression and stress then cause the crust to bulge and rise upwards. |  | This is a location where oceanic plate is being torn apart. The resulting gap in the crust allows magma to rise to the surface to form new rock. The ridges of new rock with a valley or gap in the center are known as mid-ocean ridges. Since the crust is typically thin at these spots due to tension, volcanoes can be more common. |
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| These are rivers of moving liquid rock that rise in loops from the hot core, cool near the surface, and then return to the core. As the rivers of moving rock slide along underneath the Earth’s crust, they drag the plates above along with them, causing Earth’s surface to move. |  | This is a location where continental plate is being torn apart. The resulting gap in the crust allows magma to rise to the surface to form new rock. The ridges of new rock with a gap of valley in the center are known as a rift valley. Since the crust is typically thin at these spots due to tension, volcanoes can be more common. |