

Name: _____

Science Hour: _____

Fast and Slow Geologic Processes of the Earth

Directions: Play the Legends of Learning GeoProcess Game. As each term from the worksheet appears, write what is on the white card when you click on the correct geologic process for that question. Each term will be used in the game multiple times, but you will only write about it once.



Fill in the blanks:

- Different geological processes act at different **rates**, from extremely **fast** to very **slow**.

Geologic Process	What is this referring to?	Does this geologic process happen fast or slow?
Crystallization	During the cooling process of magma crystallization begins as a consequence of the decrease in temperature. When magma cools in deep places of the terrestrial crust the formation of minerals occurs.	slow
Earthquakes	Earthquakes are tremors or quakes caused by the sudden release of the energy accumulated during long intervals of time in which the tectonic plates have made efforts to move.	fast
Erosion	Erosion is a process that transfer earth materials like rock, soil, mud, or weathered sediment to a new location. It also happens in response to gravity and human activities.	slow
Eruptions	The deep rock material is subjected to very high pressures and temperatures, and when the rigid lithospheric plate undergoes a rupture, that material tends to escape through it - overflowing on the surface.	fast

Learning Objective: Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.

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Deposition	Is the sedimentary process that consists of the accumulation of minerals or organic matter transported by water, wind or ice.	slow
Landslide	A landslide encompasses a broad spectrum of soil movements - such as rock falls, slope bank depth, and surface debris flows.	fast
Meteors	Often small objects collide the earth; asteroids 5 to 10 meters in diameter shoot the atmosphere with as much energy as an atomic bomb. With approximately 15 kilotons, they usually explode in the upper atmosphere layer.	fast
Movement of Continents	There is multiple forms of evidence showing that tectonic plates float over the material of the asthenosphere and move relative to each other: thus. Continents that are now separated were once united.	slow
Movement of Rivers and Oceans	The constant flow of water transforms the surrounding environment - mainly causing erosion of the soil, carrying sediments, and weathering the rocks for long periods of time.	fast
Mountain Formation	Mountains are formed by movements and geographical accidents, usually caused by volcanic phenomena and movements between tectonics plates.	slow
Water Cycle	Continuously and slowly at room temperature, water evaporates. It returns to the liquid state by the condensation process - forming the clouds. When they are heavier than the resistance that keeps them suspended, the precipitation stops and the water falls in the form of rain, returning to the ground and restarting the cycle.	fast

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