

EARTH SYSTEMS: THE ROCK CYCLE

Comprehensive Geological Transformation Reference

Igneous

Formed from the cooling of magma or lava.

Sedimentary

Formed from accumulation of dust and organic matter.

Metamorphic

Formed under intense heat and pressure.

[CONCEPTUAL DIAGRAM: INTERACTION OF MAGMA, SEDIMENT, AND CRUST]

TRANSITION PROCESS	MECHANISM	RESULTING STATE
Weathering & Erosion	Atmospheric/Water breakdown	Sediment
Lithification	Compaction and Cementation	Sedimentary Rock
Metamorphism	Heat and Tectonic Pressure	Metamorphic Rock
Melting	Subduction/Internal Heat	Magma

TRANSITION PROCESS**MECHANISM****RESULTING STATE****Crystallization**

Cooling of molten rock

Igneous Rock

Geology Educational Series â€œ Template Reference Only â€œ Earth Sciences Division