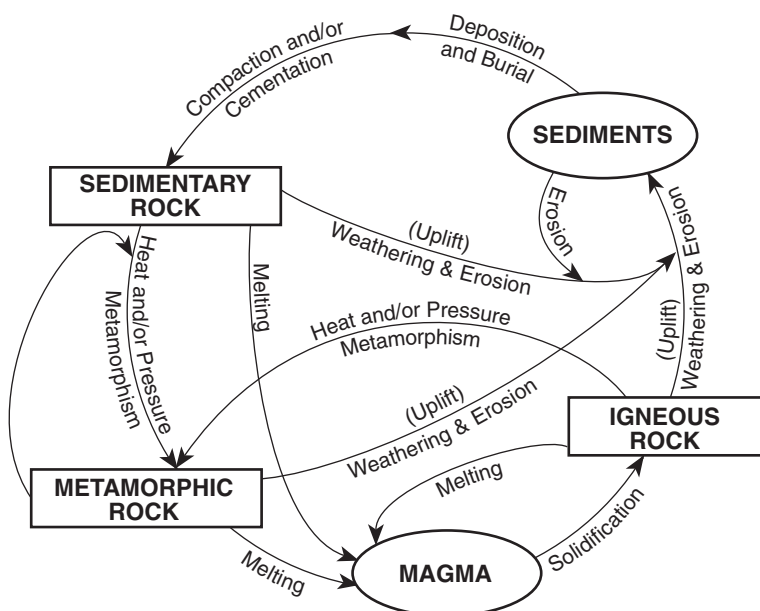
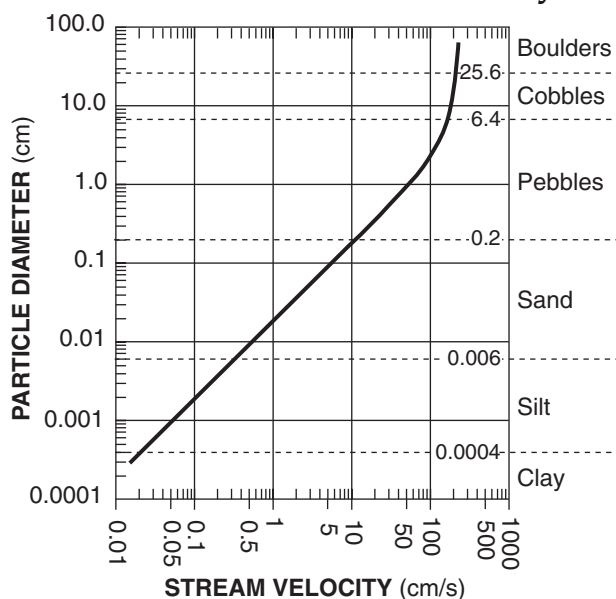


Rock Cycle in Earth's Crust



Relationship of Transported Particle Size to Water Velocity



This generalized graph shows the water velocity needed to maintain, but not start, movement. Variations occur due to differences in particle density and shape.

Scheme for Igneous Rock Identification

Scheme for Igneous Rock Identification							CRYSTAL SIZE	TEXTURE	
IGNEOUS ROCKS	ENVIRONMENT OF FORMATION		Obsidian (usually appears black)		Basaltic glass		non-crystalline	Glassy	Non-vesicular
			Pumice		Scoria				Vesicular (gas pockets)
	INTRUSIVE (Plutonic)	Vesicular rhyolite		Vesicular andesite	Vesicular basalt		less than 1 mm	Fine	Non-vesicular
		Rhyolite		Andesite	Basalt				
		Granite		Diorite	Diabase		1 mm to 10 mm	Coarse	
		Pegmatite			Gabbro				

CHARACTERISTICS	LIGHTER	← COLOR →		DARKER
	LOWER	← DENSITY →		HIGHER
	FELSIC (rich in Si, Al)	← COMPOSITION →		MAFIC (rich in Fe, Mg)

MINERAL COMPOSITION (relative by volume)	100%	Potassium feldspar (pink to white)	100%
	75%	Quartz (clear to white)	75%
50%	Plagioclase feldspar (white to gray)	50%	
25%	Biotite (black)	25%	
0%	Amphibole (black)	0%	
	Pyroxene (green)		
	Olivine (green)		