

TABLE 6-1. CLASSIFICATION OF METAMORPHIC ROCKS

TEXTURE		PARTICLE SIZE	COMPOSITION	COMMENTS	ROCK NAME
ORIENTED GRAINS	Foliated	Fine grained, minerals not visible	Clay minerals, micas	Dense	Slate
			Clay minerals, micas	Satiny luster	Phyllite
	Foliated or lineated	Medium to coarse grained, minerals visible	Muscovite, biotite, chlorite, talc, garnet, kyanite, staurolite, quartz, ferromagnesian minerals.	Rock name is preceded by diagnostic minerals such as garnet mica schist, kyanite biotite schist, hornblende schist	Schist
			Feldspars, quartz, micas, ferromagnesian minerals.	Banding due to alternation of light and dark minerals	Gneiss
NON-ORIENTED GRAINS	Medium to coarse grained, minerals visible	Calcite ( $\text{CaCO}_3$ )	Hardness of 3; fizzes rapidly with dilute HCl	Marble	
		Dolomite ( $\text{Ca,Mg}(\text{CO}_3)_2$ )	Fizzes with dilute HCl only when powdered	Dolomitic Marble	
		Quartz ( $\text{SiO}_2$ )	Hardness of 7; breaks across grains	Quartzite	
		Amphiboles	Generally black; prismatic crystals with 2 directions of cleavage at $120^\circ$	Amphibolite	
		Anything that could be a conglomerate	Breaks across grains as well as around them	Metaconglomerate	
	Fine grained, minerals not visible	Clay minerals, micas	Dense, dark colored	Hornfels	
		Carbonaceous material	Black, shiny, conchoidal fracture	Anthracite Coal	
Cataclastic	Fine to coarse	Any minerals	Fragments	Mylonite	