

Classification of Metamorphic Rocks

Texture		Characteristics	Rock Name	
FOLIATED	Non-color banded	Very fine grained	Rock splits along relatively flat, slaty cleavage surfaces; Slaty cleavage surfaces are generally dull with little or no sheen; Unlike shale, slate generally does not smell earthy when wet	SLATE
		Fine grained	Rock cleavage surfaces are generally not flat and have a silky sheen; A few small, individual crystals (porphyroblasts) may be visible	PHYLLITE
		Coarse to fine grained	Parallel orientation of large, visible crystals of platy minerals (e.g. micas, chlorite and talc) forms schistosity; Schists are named for their distinctive minerals (e.g. garnet schist, biotite schist).	SCHIST (specify the distinctive mineral)
	Color banded	Coarse grained	Multiple, commonly discontinuous, crystalline bands of light-colored minerals such as quartz and feldspar, and crystalline bands or pods of oriented dark minerals, such as amphibole and biotite	GNEISS

NONFOLIATED (Granoblastic)	Very fine grained	Black, massive with conchoidal fracture, low density, shiny luster	ANTHRACITE
	Fine or very fine grained	Irregularly colored, light to dark green and black: Green serpentine is the dominant mineral, with some talc or chlorite; Slick, curved surfaces and dark-colored, cross cutting veins may be common	SERPENTINITE
	Fine grained	Equi-dimensional, randomly oriented crystals of a variety of minerals such as green pyroxene, red garnet, talc, graphite, and calcite	HORNFEL
	Fine, medium or coarse grained	Broken surface has a scaly appearance; Breakage occurs across, rather than around, sand-sized grains of quartz and other minerals; Dark streaks or lines of relict layering may be present	QUARTZITE
		Coarse, interlocking crystals of calcite or dolomite; May contain dark layers or veins of other minerals; In finely crystalline marble, broken surfaces may have a scaly appearance	MARBLE
	Medium or coarse grained	Amphibole dominant – some tabular crystals may have a preferred orientation producing a weak foliation; feldspar may also be common	AMPHIBOLITE
	Coarse grained	Numerous grains of rock fragments larger than 2mm in diameter; on broken surfaces most breakage occurs across the grains rather than around them; grains may be deformed	METACONGLOMERATE