

# METAMORPHIC ROCK IDENTIFICATION

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	IDENTIFY ROCK'S FOLIATION	TEXTURAL FEATURES	MINERAL COMPOSITION	ROCK NAME	PARENT ROCK
FOLIATED <i>layered texture</i>	Fine-grained or no visible grains	Flat, slaty cleavage is well developed. Dense, microscopic grains, may exhibit slight sheen (or dull luster). Clanky sound when struck. Breaks into hard, flat sheets.	Fine, microscopic clay or mica.	SLATE	Shale
	Medium - to coarse-grained	Finely crystalline; micas hardly discernible, but impart sheen or luster. Breaks along wavy surfaces.	Dark silicates and micas.	PHYLLITE	Siltstone or shale
		Schistose texture. Foliation formed by alignment of visible crystals. Rock breaks along scaly foliation surfaces. Medium to fine-grained. Sparkling appearance.	Common minerals include chlorite, biotite, muscovite, garnet and hornblende. Recognizable minerals used as part of rock name. Porphyroblasts common.	MICA SCHIST  GARNET SCHIST	Siltstone or shale
NON - FOLIATED <i>no layered texture</i>		Gneissic banding. Coarse-grained. Foliation present as minerals arranged into alternating light and dark layers giving the rock a banded texture in side view. Crystalline texture. No cleavage.	Light-colored quartz and feldspar; dark ferromagnesian minerals.	GNEISS	Shale or granitic rocks
		Medium- to coarse-grained crystalline texture.	Crystals of amphibole (hornblende) in blade - like crystals.	AMPHIBOLITE	Basalt, gabbro, or ultramafic igneous rocks
	Fine-grained or no visible grains	Microcrystalline texture. Glassy black sheen. Conchoidal fracture. Low density.	Fine, tar-like, organic makeup.	ANTHRACITE COAL	Coal
		Dense and dark-colored. Fine or microcrystalline texture. Very hard. Color can range from gray, gray-green to black.	Microscopic dark silicates.	HORNFELS	Many rock types
		Microcrystalline or no visible grains with smooth, wavy surfaces. May be dull or glossy. Usually shades of green.	Serpentine. May have fibrous asbestos visible.	SERPENTINITE	Ultramafic igneous rocks or peridotite
		Microcrystalline or no visible grains. Can be scratched with a fingernail. Shades of green, gray, brown or white. Soapy feel.	Talc.	SOAPSTONE OR TALC SCHIST	Ultramafic igneous rocks
	Fine- to coarse-grained	Crystalline. Hard (scratches glass). Breaks across grains. Sandy or sugary texture. Color variable; can be white, pink, buff, brown, red, purple.	Quartz grains fused together. Grains will not rub off like sandstone.	QUARTZITE	Quartz sandstone
		Finely crystalline (resembling a sugar cube) to medium or coarse texture. Color variable; white, pink, gray, among others. Fossils in some varieties.	Calcite or dolomite crystals tightly fused together. Calcite effervesces with HCl; dolomite effervesces only when powdered.	MARBLE	Limestone or dolostone
		Texture of conglomerate, but breaks across clasts as easily as around them. Pebbles may be stretched (lineated) or cut by rock cleavage	Granules or pebbles are commonly granitic or jasper, chert, quartz or quartzite.	META-CONGLOMERATE	Conglomerate