

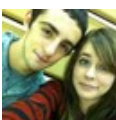
Minerals	
Potassium	Salmon pink, white
Feldspar	Two cleavages at about 90 degrees
H = 6	
Plagioclase	White to dark gray
H = 6	Two cleavages at almost 90 degrees
	Straight, parallel striations
Quartz	Conchoidal fracture
H = 7	Vitreous luster
Muscovite	Colorless, silvery white, brownish silvery white
H = 2-2.5	One perfect cleavage
	Transparent, flexible, and elastic in thin sheets
Biotite	Black to brownish black
H = 2.5-3	One perfect cleavage
	Flexible and elastic in thin sheets
Hornblende (Amphibole)	Black
H = 5	Two perfect cleavages at 124 and 56 degrees
	Splintery
Augite (Pyroxene)	Black to dark green
H = 5-6	Two imperfect cleavages at almost 90 degrees
Olivine	Olive green to yellow green
H = 6.5-7	Granular
Gypsum	Clear, white, light gray
H = 2	Vitreous to pearly
Pyrite	Metallic
H = 6-6.5	Brass yellow

Minerals (cont)	
Calcite	Clear, white, others
H = 3	Three perfect cleavages form rhombic cleavage fragments
	Reacts strongly with HCl
Dolomite	Reacts slowly or not at all with HCl
H = 3-3.5	Three indistinct cleavages
Halite	Clear to gray to red
H = 2.5	Three perfect cleavages at 90 degrees
	Salty taste

Igneous Vocabulary	
Phaneritic	Coarse-grained (>1 mm)
Aphanitic	Fine-grained (<1 mm)
Pegmatitic	Exceptionally large crystals (>3 cm)
Porphyritic	Two crystal sizes
Phenocrysts	Larger crystals
Groundmass	Smaller crystals surrounding phenocrysts
Vesicular	Bubbles
Pyroclastic	Multiple fragments

Igneous Rocks	
Gabbro (phaneritic)	Intrusive, mafic
	Ca-plagioclase, black pyroxene, olivine

Igneous Rocks (cont)	
Diorite (phaneritic)	Intrusive, intermediate
	Na-Ca-plagioclase and hornblende
	⊕ Biotite and quartz
Granite (phaneritic)	Intrusive, felsic
	Quartz and K-feldspar
	⊕ Na-plagioclase, biotite, and hornblende
Granite (porphyritic)	Intrusive, felsic
	Coarse-grained
	Two crystal sizes
Granite pegmatite	Intrusive, felsic
	Very coarse-grained
Basalt (aphanitic)	Extrusive, mafic
	Dark gray
	⊕ Ca-plagioclase and olivine
Basalt (vesicular)	Extrusive, mafic
	Dark gray
	⊕ Ca-plagioclase and olivine
Andesite (porphyritic)	Extrusive, intermediate
	Fine-grained
	Gray
	⊕ Plagioclase and hornblende or biotite
Rhyolite	Extrusive, felsic
	Fine-grained version of granite
Tuff (pyroclastic)	Extrusive
	Particle size less than 6.4 cm
Obsidian (glassy)	Extrusive, felsic
Pumice	Extrusive, felsic
	Vesicular
	Very light



By Rachel (psychedxout)

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Page 1 of 2.

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Igneous Rocks (cont)

Scoria	Extrusive, mafic Vesicular Black to reddish brown
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Metamorphic Vocabulary

Foliated	Parallel or nearly parallel planes
Slaty	Foliation made of minerals to small to see without a microscope
Phyllitic	Foliation composed of minerals visible with handlens to barely visible to naked eye
Schistose	Foliation composed of mineral crystals large enough to see unaided
Gneissic	Coarse foliation Parallel band or layers of light and dark minerals

Metamorphic Rocks

	Foliated
Slate	Low grade; Very fine grained Generally dark Shale or mudstone
Phyllite	Low grade; Fine grained Silky, shiny Shale or mudstone
Schist	Intermediate Medium to coarse grained Shale or mudstone
Gneiss	High grade Medium to coarse grained Shale, mudstone, or granite
Migmatite	Border between igneous and metamorphic Medium to coarse grained Shale, mudstone, or granite

Nonfoliated

Metamorphic Rocks (cont)

Marble	Grade varies Coarsely crystalline Limestone or dolostone
Quartzite	Grade varies Crystalline Quartz sandstone
Anthracite coal	Low to medium grade Conchoidal fracture Coal
Greenstone	Low to medium grade Greenish gray to black Basalt or gabbro
Amphibolite	Medium to high grade Dark gray to black Medium to coarse grained Basalt or gabbro
Soapstone	Low to medium grade Gray to dark greenish gray Fine grained; Soft Peridotite
Serpentinite	Variable grade Greenish Mottled or streaked Peridotite
Metaconglomerate	Low to medium grade Conglomerate, graywacke, chert
Hornfels	Low grade; Contact Fine grained; Dark Varies

Sedimentary Rocks

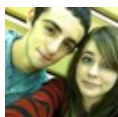
Quartz sandstone	Sand grains of quartz White, rusty brown
Conglomerate	Made of pebbles
Limestone	Calcite Bubbles in acid

Sedimentary Rocks (cont)

Shale	Fissile Black to gray, red, or green
Dolostone	Lesser reaction with acid Crystalline Light gray or buff
Chert	Microcrystalline quartz Conchoidal fracture
Coal	Brown to black Noncrystalline
Mudstone	Not fissile Black to gray, red, or green
Sandstone	Made of sand
Oolite	Limestone Sand-sized spheres
Coquina	Limestone Poorly cemented bioclastic debris
Breccia	Angular particles
Rock	White, light gray
Gypsum	Crystalline

Sedimentary Vocabulary

Clastic	Clasts bound together
Bioclastic	Abundant fossils or fossil fragments
Crystalline	Interlocking crystals
Fissile	Splits into sheets



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Page 2 of 2.

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