

CLASSIFICATION OF

Sedimentary Rocks

STEP 1 <i>Determine makeup</i>	STEP 2 <i>Determine Grain Size</i>	STEP 3 <i>Rock Description</i>	STEP 4 <i>Rock Name</i>
CLASTIC <i>Composed of pieces of rocks and minerals.</i>	Granule (> 2 mm)	Rounded rock or mineral fragments; usually poorly sorted.	<i>Conglomerate</i>
		Angular rock or minerals fragments; usually poorly sorted.	<i>Breccia</i>
	Sand (0.06 mm to 2 mm)	Mostly quartz grains; sorting and rounding variable.	<i>Quartz Sandstone</i>
		Mostly quartz with at least 25% feldspar; rock fragments common; usually poorly sorted with angular grains.	<i>Arkose</i>
		Clay, quartz, feldspars, and rock fragments; usually poorly sorted with angular grains; often dark color.	<i>Graywacke</i>
	Silt (< 0.06 mm)	Silt-sized particles are too small to identify; no layering making it not fissile.	<i>Siltstone</i>
		Silt and clay-sized particles are too small to identify; layering makes rock break in planes making it fissile.	<i>Shale</i>
	Clay (< 0.004 mm)	Clay-sized particles are too small to see.	<i>Claystone</i>

STEP 1 <i>Determine makeup</i>	STEP 2 <i>Composition</i>	STEP 3 <i>Rock Description</i>	STEP 4 <i>Rock Name</i>
CHEMICAL, BIOCHEMICAL & ORGANIC <i>Made of minerals that have crystallized together, or biological fragments of shells or plants.</i>	Calcite All fizz with acid	Abundant fossils. Possibly in micrite.	<i>Fossiliferous Limestone</i>
		Abundant ooids - coarse, sand-sized spheres with concentric internal layers	<i>Oolitic Limestone</i>
		Microcrystalline*; breaks with conchoidal fracture.	<i>Micrite</i>
		Shell fragments loosely cemented with a high porosity.	<i>Coquina</i>
		Microscopic fossil fragments; chalky; white color; soft.	<i>Chalk</i>
		Microcrystalline*; color banding of browns, grays, whites, and blacks.	<i>Travertine</i>
		Coarse crystals easily visible.	<i>Crystalline Limestone</i>
	Dolomite	Fizzes with acid only when powdered; fine to coarsely crystalline; may contain fossils.	<i>Dolostone</i>
	Microcrystalline Quartz	Microcrystalline*; conchoidal fracture; hardness of 7 so steel nail leaves a metal streak on the chert surface; sharp edges used for pre-historic spearheads and knives; synonymous with flint.	<i>Chert</i>
	Gypsum	Crystalline; very soft with a hardness < 2, white, gray, or pink color.	<i>Rock Gypsum</i>
Halite	Crystalline; salty taste, white or gray color; fairly soft hardness of 2.5.	<i>Rock Salt</i>	
Plant Material	Plant fragments; low density; brown to black color; often crumbly.	<i>Bituminous Coal</i>	

* Microcrystalline - crystals that are visible only through a high-powered microscope.