


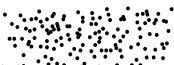
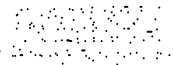
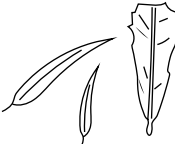

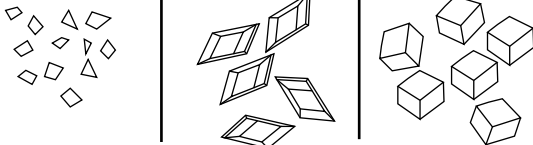
















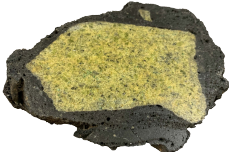

Sedimentary Rocks

Sedimentary rocks are formed by the breakdown (both physical and chemical) of pre-existing rocks, which may be of igneous, metamorphic or sedimentary origin. They are classified according to the predominant grain size present, as well as by their mineral content.

Texture	CLASTIC (Composed of rock fragments)					BIOCLASTIC (Organic)		CRYSTALLINE		
Sediment	 Rounded pebbles	 Angular fragments	 Sand	 Silt	 Clay	 Plant remains	 Cemented shells	 Fine to coarse crystals		
Example	Conglomerate 	Breccia 	Sandstone 	Siltstone 	Shale 	Bituminous coal 	Limestone 		Rock gypsum 	Rock salt 
Composition	Mainly composed of quartz, feldspar and clay minerals.					Carbon	Calcite	Precipitated CaCO ₃	Gypsum	Halite

Igneous Rocks

Igneous rocks are formed when magma cools and solidifies.

	Intrusive		Extrusive
	Plutonic	Sub-volcanic	Volcanic
Formation in Earth	Deep	Shallow	Surface
Grain size	Coarse	Medium	Fine
Composition			
Felsic rich in Al, Si lighter	 Granite		 Rhyolite
Mafic darker	 Gabbro	 Dolerite	 Basalt
Ultra Mafic rich in Fe, Mg	 Peridotite		 Picrite

Other common volcanic rocks

Bomb



Molten projectile

Pumice



Pyroclastic rock (rhyolitic)
Abundant cavities

Obsidian



Dark, volcanic glass (<1% water)









Scoria



Pyroclastic rock (basaltic)
Abundant cavities

Metamorphic Rocks

Metamorphic rocks are pre-existing rocks whose mineralogy and/or texture has been changed by processes within the Earth. They form because of changes in temperature and depth of burial within the Earth without melting.

	FOLIATED (Leaf-like layers)			NON-FOLIATED (No layers)		
Texture	Mineral Alignment		Visible Banding Pattern	No mineral alignment or visible banding pattern		
Grain Size	Fine	Fine to Medium	Medium to Coarse	Fine	Medium to Coarse	Medium to Coarse
Parent Rock	Shale Mudstone Siltstone	Slate Phyllite	Schist	Bituminous coal	Limestone Dolomite	Quartz sandstone
Examples of Metamorphic Rock		 				
	Increasing metamorphism 					
Main Composition	Mica	Mica, quartz, feldspar, amphibole, garnet	Mica, quartz, feldspar, amphibole, garnet, pyroxene	Carbon	Calcite and/or Dolomite	Quartz

Key: ↓ Regional (heat and pressure) metamorphism

↓ Contact (heat) metamorphism