

Sedimentary rocks are made of clasts and are usually softer than igneous or metamorphic rocks. They are not crystalline. They show signs of bedding and sometimes contain fossils.

<u>Clastic sediments</u> are classified by their grain size. They show signs of bedding.

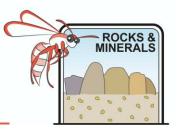
large easy to see clasts (2mm+) clasts that can be see by eye( 1.26 - 2mm) clasts that can only be seen under magnification

rounded clasts angular clasts grains felt by touch gritty against teeth smooth

conglomerate breccia sandstone siltstone mudstone

Biogenic sediments have no clasts and often have fossils. They can be massive with few signs of bedding

Name	Colour	Source	Texture	Test with acid	Comment
Coal	Black	Swamp vegetation	Soft, can scrape with metal	No result	Will ignite
			blade		
Limestone	Grey to buff	Coral reefs and shells	Variable	Effervesce	Can be massive
Chalk	White	Marine algal shells	Very soft. You can scrape	Effervesce	Tiny marine algal shells
			with fingernail. Will leave a		
			white stripe on wood.		
Spongelite	Many colours,	Microscopic silica	Harsh to touch	No result	Microscopic silica
	mostly white	skeletons of sponges			skeletons of sponges



<u>Chemical sediments</u> are formed when inorganic material builds up into a mass. Most of the rocks above also have chemical components.

**Evaporites** are formed when large masses of water dry up leaving salt (halite), gypsum (hydrated calcium sulphate and anhydrite (calcium sulphate).

**Chemical limestone** is deposited from dissolved lime in groundwater or seawater. Tamala limestone is the name given to our white coastal limestone that was used for building much of old Fremantle. The sea deposited sand dunes rich in shells. Lime from the sea shells was dissolved into groundwater and later redeposited elsewhere to leave sandy (lime poor) sections and make hard lime rich areas. This means that Tamala limestone is not laid down in time specific beds but is the generic name for chemically deposited limestone zones within sediments.

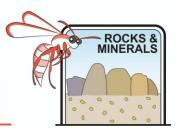
The following pictures are of sedimentary rocks from Western Australia. Name each rock type and explain which characteristics led you to this conclusion



HINT The hammer gives you an idea of scale



HINT This rock leaves a white streak on wood





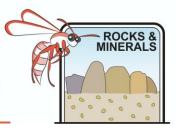
HINT The mountains were rising very very fast



HINT Beach



HINT Smooth but will scrape your teeth





HINT Feels rough and gritty



Hint It can be scraped by a finger nail.