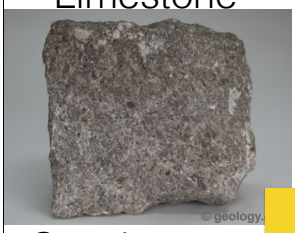
CWK CWK

Sedimentary Rocks

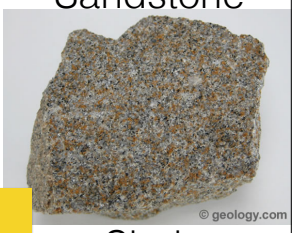
- Be able to name some sedimentary rocks
- Explain the processes of weathering, transportation, deposition, sedimentation, cementation
- Use particle diagrams to explain cementation.

Lesson 8

Limestone



Sandstone



LEARN THESE EXAMPLEs

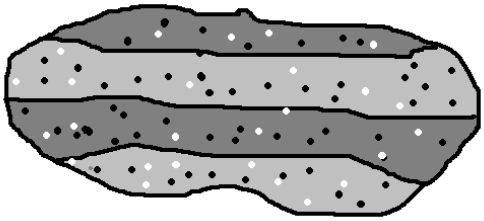
Conglomerate

Shale

Describing physical & chemical properties of sedimentary rocks

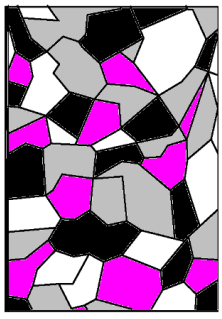
Rock Name	Colour	Crystals size	Porous?	Does it react with acid?
Limestone				
Sandstone				
Shale				
Coal				

Characteristics of Sedimentary Rocks

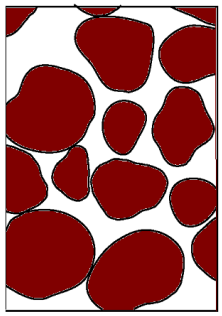


They often have little tiny grains from all the little bits of rock that have been crushed together.

Characteristics of Sedimentary Rocks

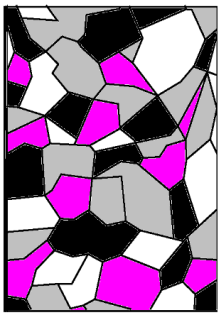


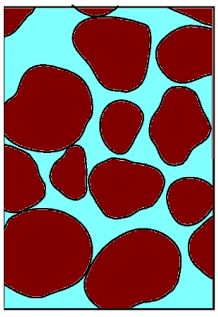
Granite has interlocking grains.



Sandstone has rounded grains.

Characteristics of Sedimentary Rocks

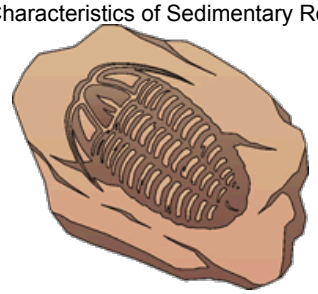




This makes sedimentary rocks porous while igneous are impervious.

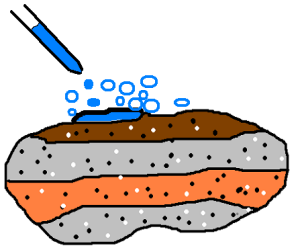
Buildings made of sandstone would be very suseptible to freeze / thaw weathering.

Characteristics of Sedimentary Rocks



They often have fossils in from animals that died and got trapped in the sediment.

Characteristics of Sedimentary Rocks



If you put acid on them you <u>often</u> get bubbles.

This is because it reacts with the shells of tiny dead animals that you can't even see.

<u>Transportation - By Wind</u>

Very fine rock particles (sediment) can be transported by wind. This happens a lot in doha, it's how sand dunes are formed and dust storms.

<u>Transportation - By Water</u>

Rock particles of all sizes can be moved by water. Huge boulders will tumble along a fast moving river as well as the finest silt. Each of these can form sedimentary rock when they meet their destination.

<u>Deposition</u>

Eventually the rock particles are carried no longer. When the water or wind (or ice) does not have enough energy they are deposited. (put down). This could happen on a sea bed or a river bank. Or where a glacier has melted.

<u>Cementation</u>

The processes through which dissolved substances in water precipitate between the grains of a sediment and bind it into a sedimentary rock.

Similar to how the mortar between bricks in a wall cement them together into one piece