Question: How do sedimentary rocks form?

ROCK GROUPS

Rocks are classified into three major groups on how they form:

IGNEOUS ROCKS

→ Formation: May form on or beneath Earth's surface.

- Extrusive rocks - igneous rocks formed from lava that erupted onto Earth's surface
- Intrusive rocks - rock that formed when magma hardened beneath Earth's surface

→ Texture: Geologists determine whether an igneous rock is extrusive or intrusive based on its texture; small, hard to see crystals indicate extrusive, large and interlocking crystals indicate intrusive

→ Composition: can sometimes be determined by color of rock

SEDIMENTARY ROCKS

sediment - small, solid pieces of material that come from rocks or remains of living things such as shells, leaves, bones and stems; mostly formed through a series of processes which include:

- erosion - form sediment by particles getting carried away from their source by wind and water
- deposition - process by which sediment settles out of the water or wind carrying it
- compaction - process that presses sediment together growing thick layers that build up over millions of years
- cementation - process in which dissolved minerals crystallize and glue particles of sediment together

METAMORPHIC ROCKS

Heat and pressure deep beneath Earth's surface can change any rock into metamorphic rock.

foliated - metamorphic rocks that have their grains arranged in parallel layers or bands

nonfoliated - mineral grains are arranged randomly