

Sedimentary Rocks



Rocks made of bits & pieces of other rocks. **Sedimentary rock** forms when sediments-rocks made of bits and pieces of other rocks are pressed and cemented together, or when minerals form from solutions.



How Sedimentary Rocks Form:

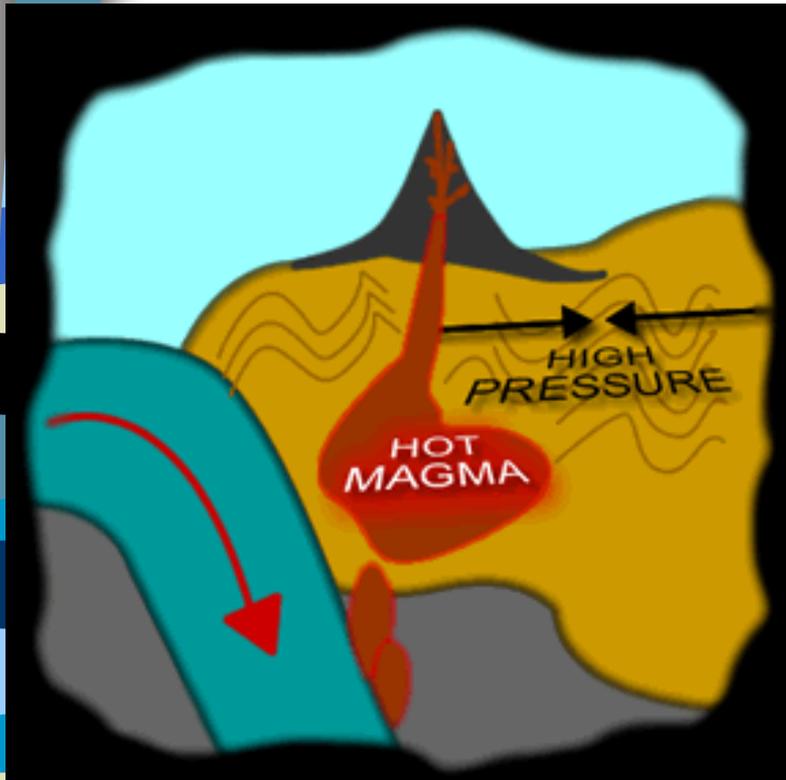
- When rocks, plants, and loose material get pressed into layers over time.
- This process includes:
 - Erosion-running water, wind, or ice loosen and carry fragments of rock.
 - Deposition-is the process by which sediment settles out of the water or wind carrying it.
 - Compaction-particles squeezed together under great pressure.
 - Cementation- particles are glued together.



Types of sedimentary rocks?

- There are 3 main types of sedimentary rocks.
- 1. Rocks from sediments
- 2. Rocks made from remains of plants and animals. (contains fossils)
- 3. Rocks made from minerals that are dissolved in solutions

What is a metamorphic rock?



- The term "metamorphic" means "to change form."
- Any rock (igneous, sedimentary, or metamorphic) can become a **metamorphic** rock. If rocks are buried deep in the Earth at high temperatures and pressures, they form new minerals and textures all without melting. If melting occurs, magma is formed, starting the rock cycle all over again.

Metamorphic Rock Types



- There are two types of metamorphic rocks.
- Each is classified according to its composition and texture.
 - Foliated
 - Nonfoliated.

Foliated Metamorphic Rocks



- **FOLIATED** metamorphic rocks are those in which the minerals have been flattened and pushed down into parallel layers. The bands in foliated metamorphic rock look like pages in a book.
- Examples of foliated rocks are slate, shale, and gneiss.

Non-foliated



- **NON-FOLIATED** metamorphic rocks do not display layers. Rather, they are massive structures with no obvious banding. The mineral grains grow and rearrange, but they don't form layers.
- A good example of non-foliated rock is quartzite, the smooth-textured, metamorphosed form of the mineral quartz.
- A coarse-textured non-foliated rock is marble.
- Anthracite, or hard coal, is a non-foliated rock that forms when intense pressure drives gases out of soft coal, causing it to harden.