

ROCKS AND MINERALS

Earth's Layers

- Crust
- Mantle
- Core (Inner & Outer)

Crust: Outer Layer of Earth

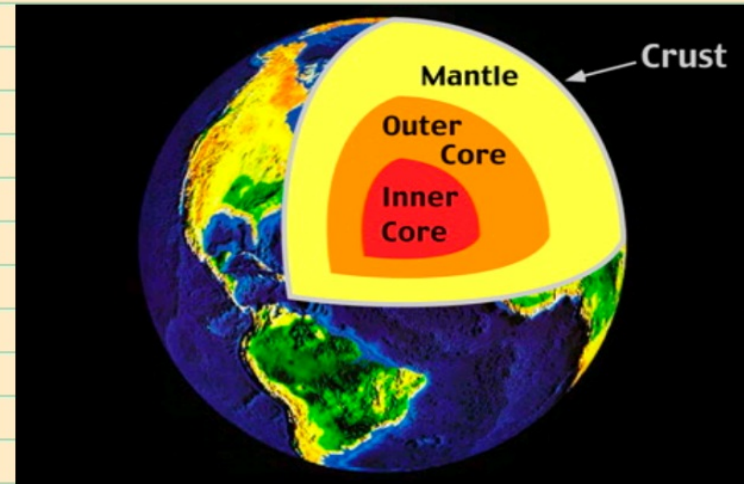
- Thinnest layer
- Thickest part: Continents (20-30 miles)
- Thinnest part: Ocean Floor (3-6 miles)

Mantle

- Middle Layer
- Has not been explored

Core

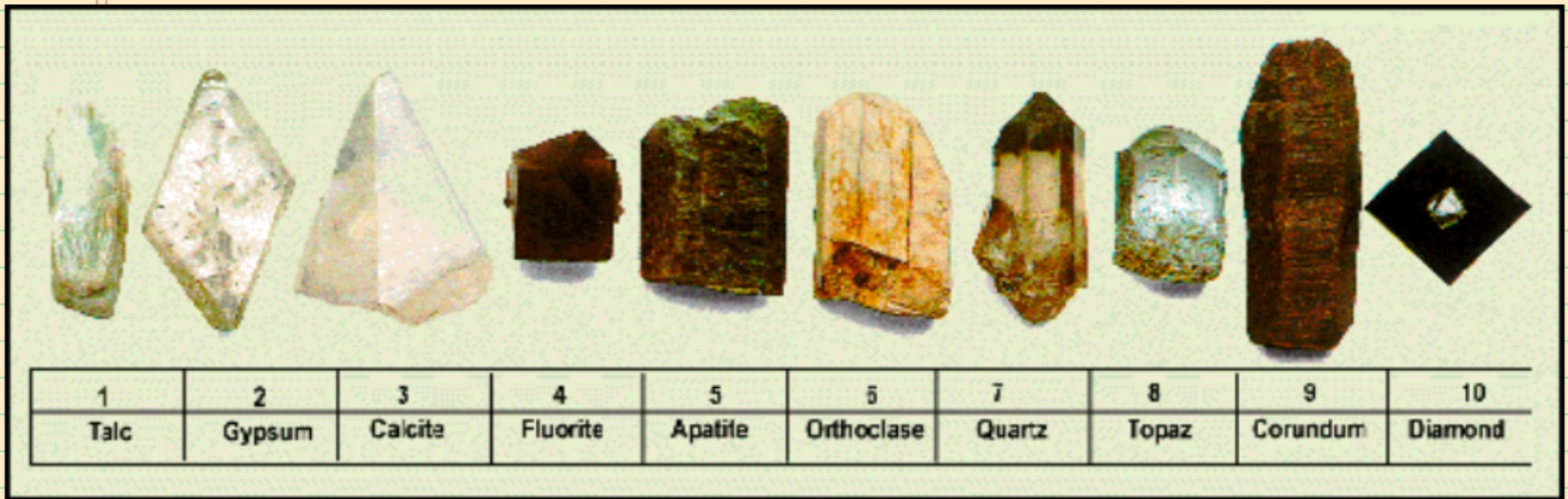
- Inner layer



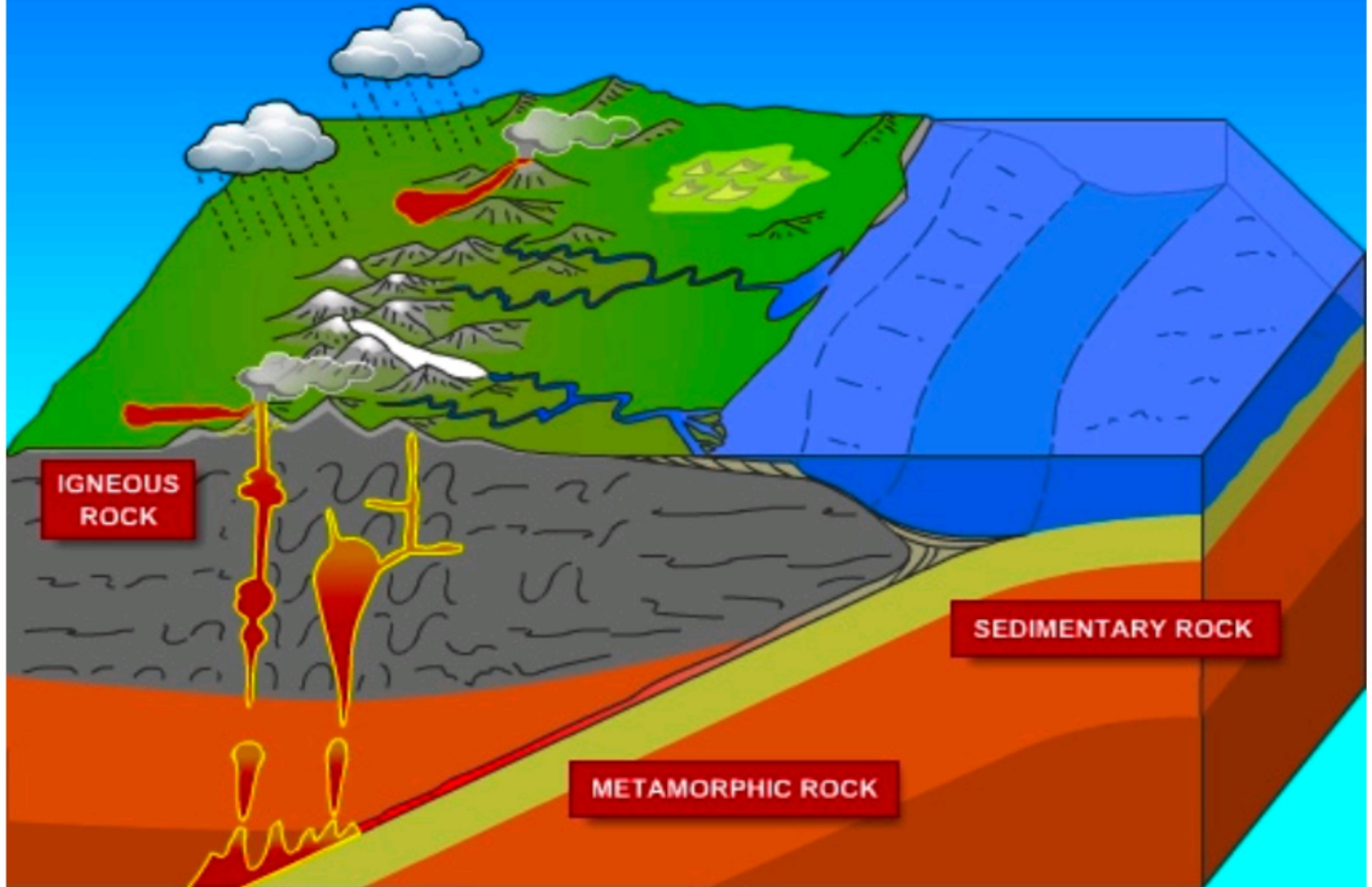
Minerals and Their Properties

- Minerals are pure, solid materials found in Earth's crust.
- Properties
 - Magnetism: Magnetite
 - Hardness: Talc (softest) and Diamond (hardest)
 - Color: Fluorite
 - Luster: Shiny or not shiny

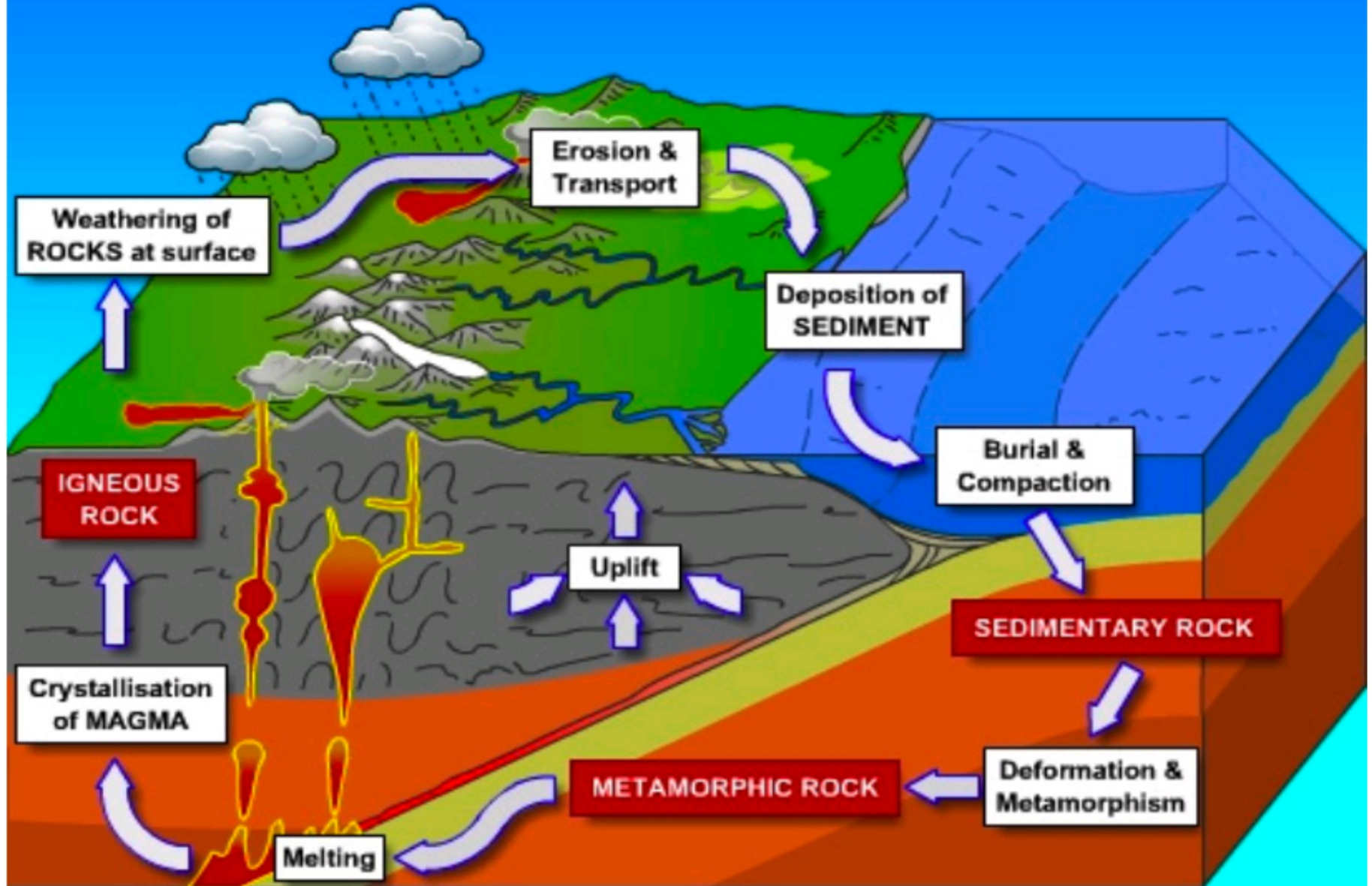
Mohs Scale of Mineral Hardness



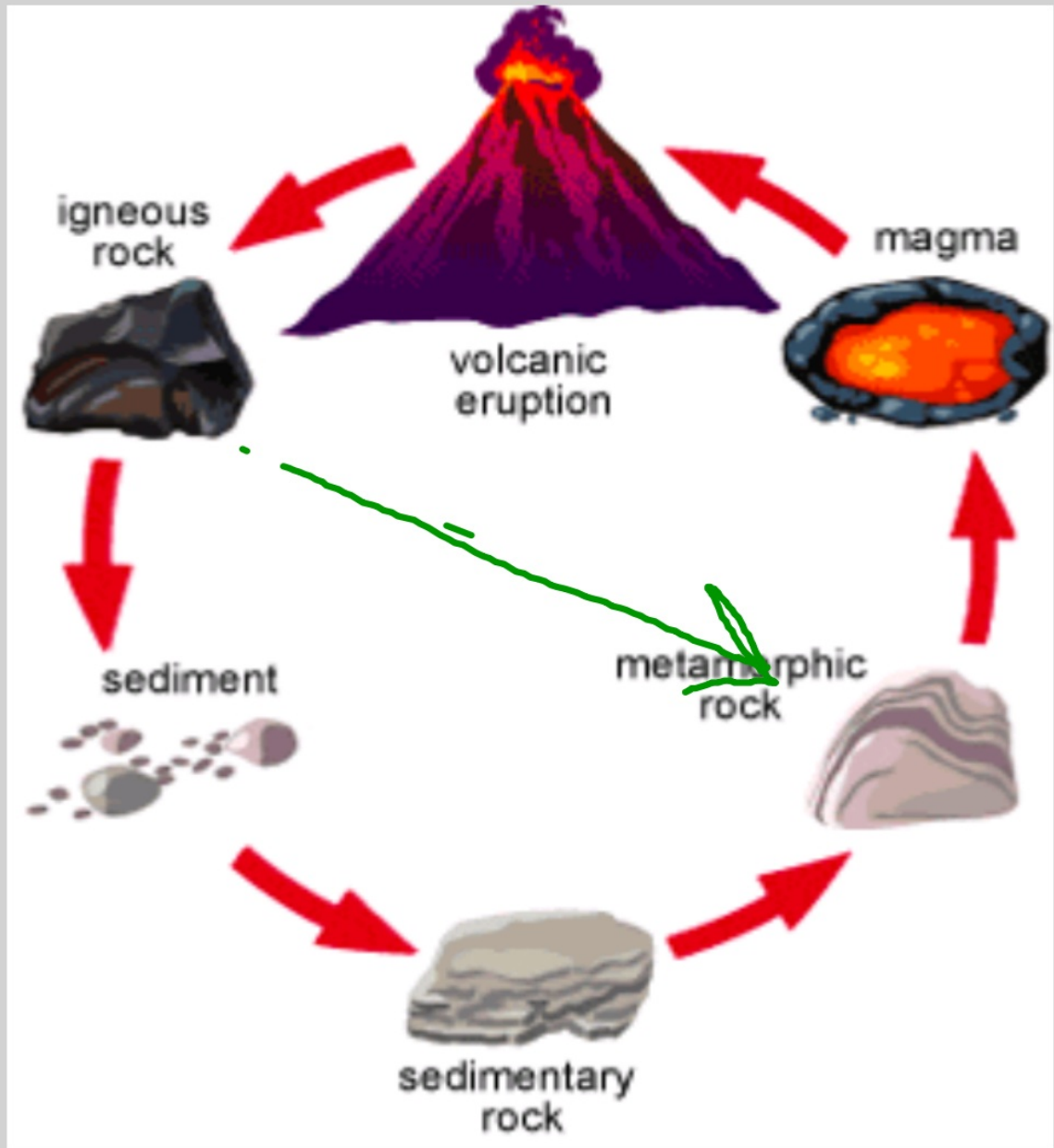
3 TYPES OF ROCK



THE ROCK CYCLE



THE ROCK CYCLE



IGNEOUS ROCKS

- Rocks formed from magma (melted rock) found inside the Earth.
- Most rocks found on Earth are Igneous.

Igneous rock that cools slowly forms large crystals.



Igneous rock that cools quickly forms small (if any) crystals.



Granite



Obsidian



Lava can cool quickly, which traps steam and gases in it. This process forms pumice, a very light igneous rock.

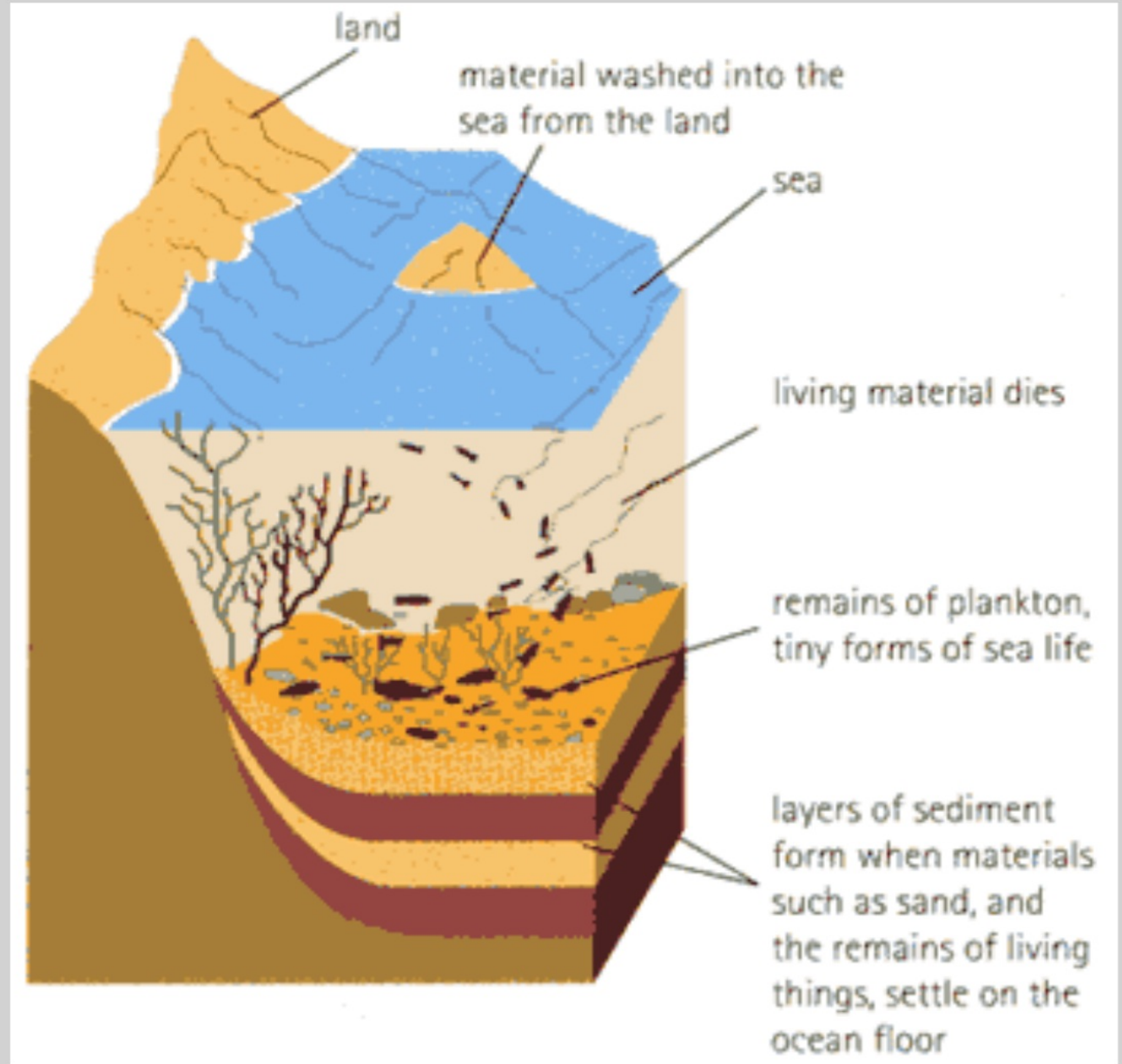


Sedimentary Rock

- Rock formed by the build-up of sediment over a long time.



How Sedimentary Rocks form...





LIMESTONE

(Sedimentary Rock)

Pyramid at
Khufu





SANDSTONE

Sedimentary
Rock



METAMORPHIC ROCK

- Metamorphosis = change
- Made when **Sedimentary and Igneous rocks** change to **Metamorphic rocks**



Sandstone



+

Heat and
Pressure =



Quartzite



