Sedimentary Rocks

• Conspicuous:

• Archives of Earth’s History:

• Fossil Fuels: Oil, coal, and gas.

What is the most conspicuous aspect of sedimentary rocks?

Sediment and Sedimentary Rock
Parental Solid Rock → Weathering → Erosion-Transportation → Deposition → Lithification → Sedimentary Rocks

The Rock Cycle

- Magma
- Igneous rock
- Weathering and Erosion
- Sedimentary rock
- Metamorphism
- Melting
- Solidification

Playa Lake

Lithification of Sand Grains

- Quartz
- Feldspar
- Overburden

A After deposition
B Compaction
C Cementation
Biological/Chemical Rocks
Organic and Inorganic

- **Inorganic** = (Chemical Precipitate Group)
- **Organic** = (e.g., most limestones, most chert, diatomite)
Carbonate Platforms: Carbonate Sediment (ooze), Warm Water
Siliceous Ooze - Diatomaceous Ooze
Diatomite - mineraloid - Opal

Diatoms - Opalline Quartz
Siliceous Oozes - Radiolarians Ooze
- Chert - microcrystalline quartz

 Radiolarians in Chert
Terrigenous Sediment
- Neritic =
- Pelagic =
Deep Marine: Turbidites, Oozes, Abyssal Clay

- Abyssal Fans - Deep Sea Fans

**Turbidites: Graded Beds**

“sole marks” = bottom of channel or bottom of bed marks made by impacting debris caused by turbulent flow