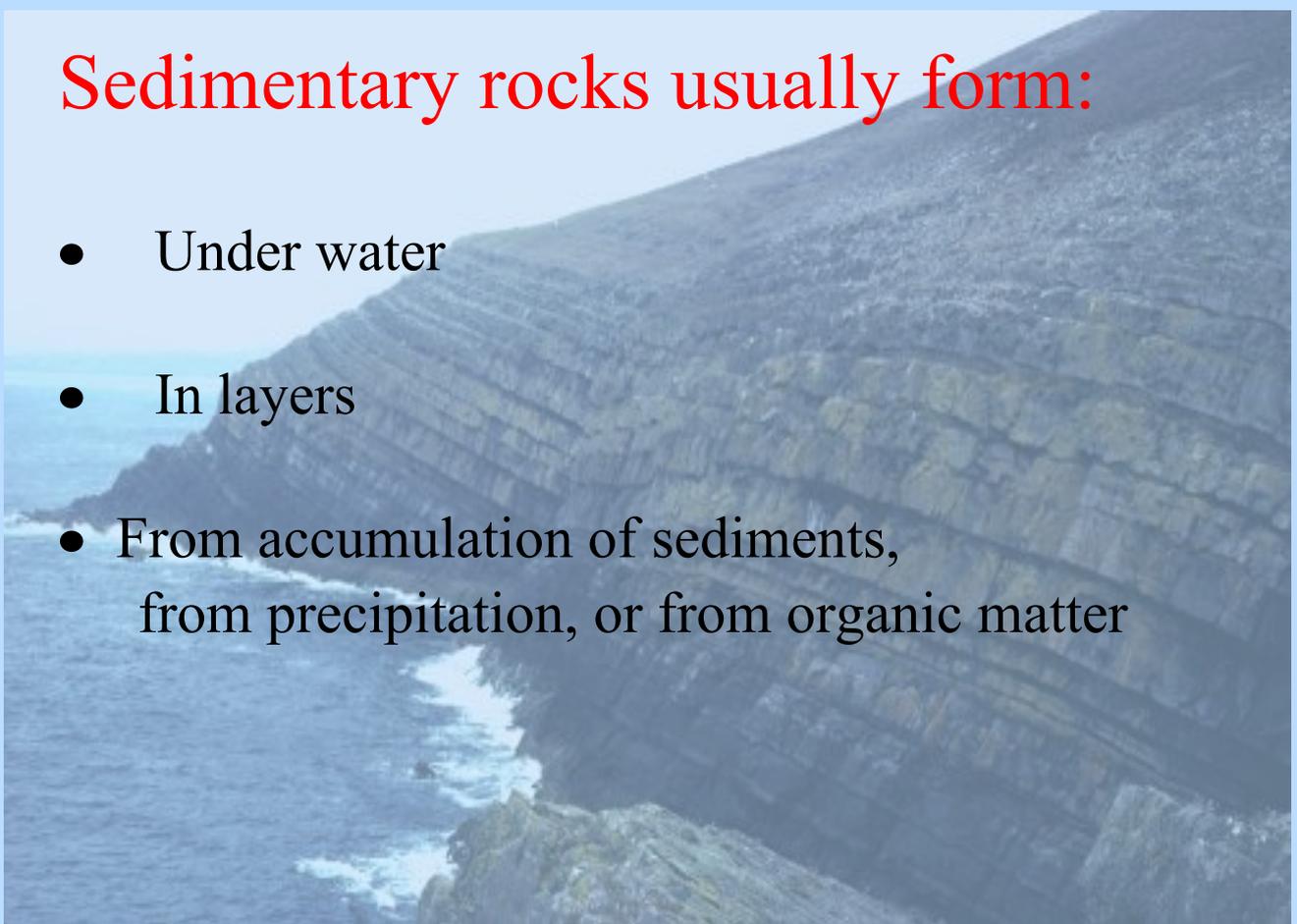


## Sedimentary rocks usually form:

- Under water
- In layers
- From accumulation of sediments, from precipitation, or from organic matter



# Sedimentary Rocks

Broken into three categories

1. Clastic (fragmental)
2. Crystalline (Chemically formed)
3. Bioclastic (Organically formed)

# Sedimentary Rocks Type 1: Clastic

Formed by rock particles and/or sediments that are pressed and cemented together

Three things have to happen:

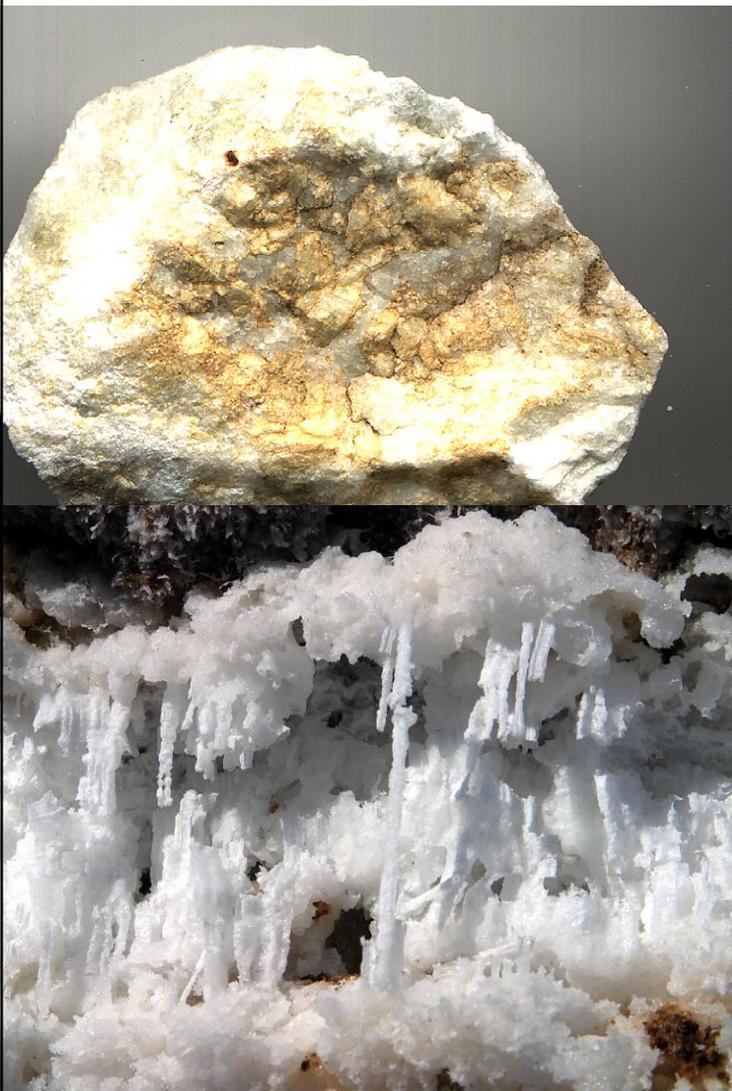
- 1) deposition of sediments
- 2) compaction
- 3) cementation

Examples:  
Conglomerate  
Sandstone



## Sedimentary Rocks Type 2: Crystalline (Chemical) (sometimes called **EVAPORITES**)

- Formed when minerals dissolved in water
  - settle out OR precipitate
  - Are left behind when the water evaporates
- (think putting too much sugar in iced tea, boiling a pan dry)



### Examples:

A) **Gypsum**: evaporite that crystallizes out when water evaporates at Earth's surface. Large deposits of Gypsum are present in New York.

## Sedimentary Type 2: Crystalline



B) **Halite** ( $\text{NaCl}$ )  
(also called **ROCK SALT**)  
salt water gets trapped in pools by other sediments. Water evaporates, leaving thick beds of salt.



## Sedimentary Rocks Type 3: Bioclastic (Organic)

Remains of plants and animals

May contain fossils, especially of marine life:

- 1) shells & skeletons of sea critters sink to ocean floor
- 2) layers build up over time
- 3) pressure cements it into limestone
- 4) often fizzes with acid



Limestone can be  
Chemical (precipitated)  
OR  
Bioclastic (organic)



## How to use your Reference Table

1. Decide if it is inorganic or organic.  
Does it look like pieces of rock?  
Are there shell fragments?  
Are there fossils?
2. Look at the texture.  
Clastic: pieces of sediment glued together?  
Crystalline: does it look like it has crystals?  
Bioclastic: anything that could have been alive?
3. Look at the grain size  
Measure the grain size with your  
ESRT ruler if necessary.
4. Look at the comments box.  
Does it match your sample?
5. Read across to the rock name and map symbol.



Animals Animals/Breck P. Kent

