

6. Lecture

- ◇ 1/8 Sediment rock texture
- ◇ 2/8 Mineral composition
- ◇ 3/8 Sorting
- ◇ 4/8 Grain roundness
- ◇ 5/8 Grainsize
- ◇ 6/8 Fossil
- ◇ 7/8 Deposition environment
- ◇ 8/8 Rock name

1/8 Sediment rock texture

- ◆ Clastic
- ◆ Chemical / crystalline
- ◆ Bioclastic

2/8 Mineral composition

◊ Calcite CaCO_3 and Quartz SiO_2 are the most common minerals

◊ hydrochloric acid HCl

◊ $2\text{HCl} + \text{CaCO}_3 \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2 (\text{gas})$

◊ $\text{HCl} + \text{SiO}_2 \rightarrow \text{HCl} + \text{SiO}_2$

3/8 Sorting

◆ Well Sorted --- Poorly Sorted

4/8 Grain roundness

◆ Well Rounded --- Very Angular

5/8 Grainsize

◇e.g. Micro-crystalline, crystalline, fine, medium
coarse, very coarse

6/8 Fossil

◊ Yes or No

7/8 Deposition environment

◆e.g. terrestrial, marine, lacustrine, shallow marine,

8/8 Rock name

◆e.g. quartz-rich breccia, chert, sandstone, shale, conglomerate, limestone, shale, chalk, coquina, limestone, etc.