

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**
- **$2\text{HCl} + \text{CaCO}_3 \text{ --- } \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2 \text{ (gas)}$**
- **$\text{HCl} + \text{SiO}_2 \text{ --- } \text{HCl} + \text{SiO}_2$**

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.