

Classification of Sediments

Table 6-1 Classification of Clastic Sediments

| Particle Size | Sediment | | Rock | |
|----------------------------------|----------|-------------------------------|-------------------|-----------|
| > 256 mm 256–64 mm 64–2 mm | Gravel | } Boulder Cobble Pebble | Conglomerate | |
| 2–0.062 mm | | | Sand | Sandstone |
| 0.062–0.0039 mm | | | Silt | Siltstone |
| <0.0039 mm | Clay | | Mudstone or shale | |

Classification of Sediments

1. How are **common** sediments classified?

2. What type of **common** sediment has the largest particle size?

3. What type of **common** sediment has the smallest particle size?

4. What size particles are classified as sand?

5. What rock type is made up of cobbles?

6. How would you classify a **common** sediment particle that is 0.0020 mm in size?

7. You find a rock that consists mostly of **common** sediments of about 0.05 mm in size.
What type of rock is it likely to be?

8. Why do **most** sediment particles usually have worn surfaces and rounded corners?

9. What process produces **common** sediments?

Classification of Sedimentary Rocks

Table 6-2 Classification of Sedimentary Rocks

| Rock Type | Rock Name | Method of Formation |
|--|---|--|
| Clastic Coarse grained Medium grained Fine grained | Conglomerate or breccia Sandstone Shale | Lithification of clastic sediments |
| Organic Calcium carbonate—shells plant matter | Limestone Coal | Accumulation and lithification of remains of living things |
| Chemical Calcite Halite Gypsum | Evaporite | Precipitation of dissolved minerals from water |

Classification of Sedimentary Rocks

1. Name the three types of sedimentary rocks.

2. What is the most common sedimentary rock, and what is its method of formation?

3. How are *those* sedimentary rocks classified? (*rocks from #2*)

4. Compare and contrast conglomerate with breccia.

5. How do chemical sedimentary rocks form?

6. Name three common evaporite minerals.

7. How do organic sedimentary rocks form?

8. Name two organic sedimentary rocks.
