Geology 100
Notes on Planet Earth version 3.0

Review - Exam 2

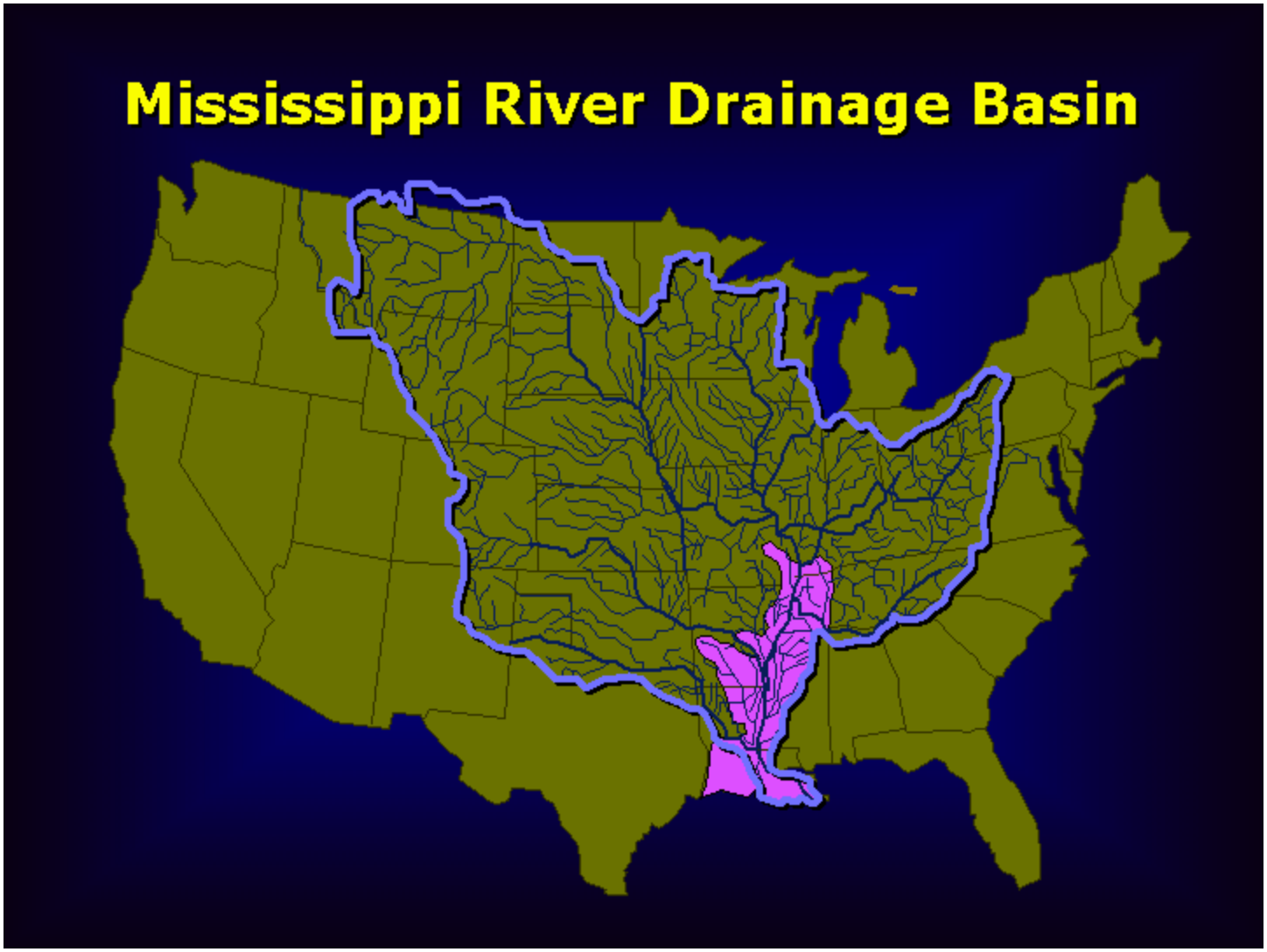
Chapter 7

Chapter 6 – Sedimentary Rocks

Conglomerates/breccias
Sandstones
Siltstones
Claystones
Mudstones

Limestones
Oolitic limestones
Dolomites
Cherts
Evaporites
Coals

Clastic Sedimentary Rocks



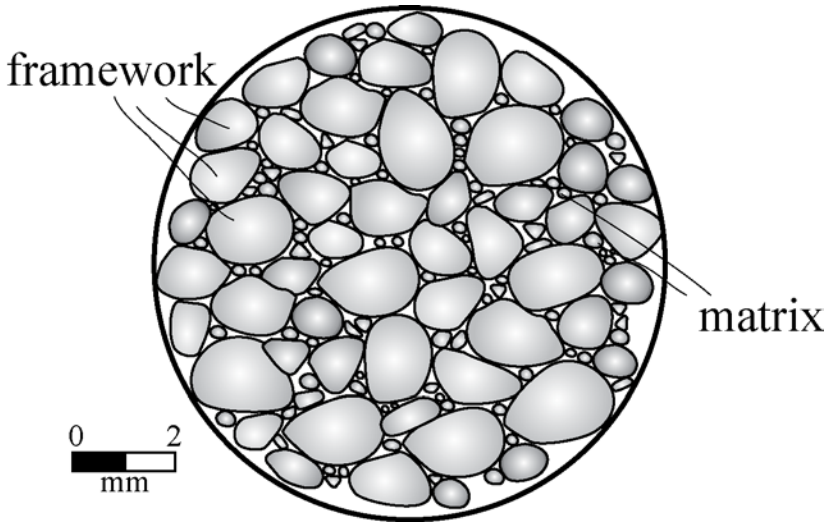
Size Classification

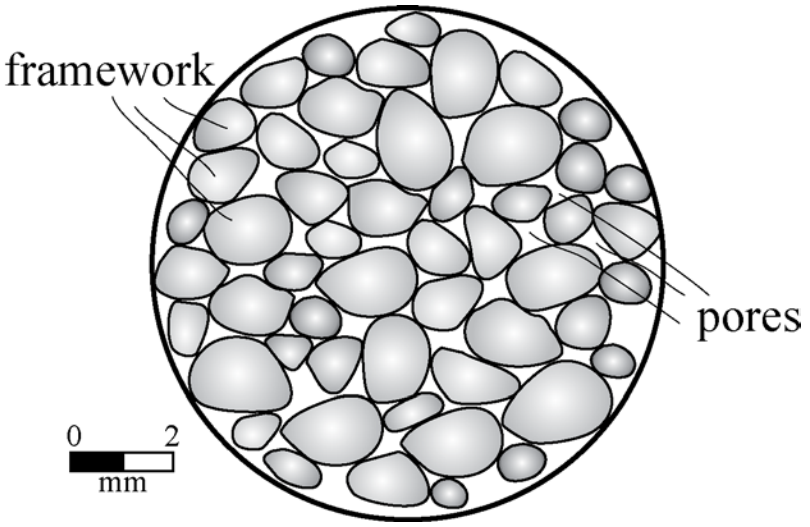
- Gravels: boulders, cobbles, pebbles
- Sand
- Silt
- Clay
- Mud

Size Classification

- Conglomerates/breccias
- Sandstones
- Siltstones
- Claystones
- Mudstones

Classifying Sandstones





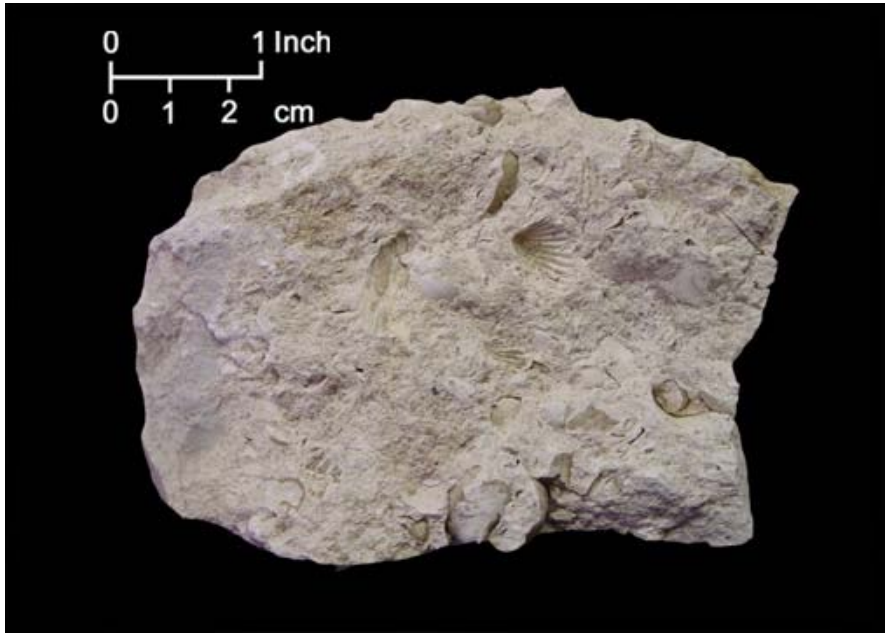
Quartz arenite/wacke
Feldspathic arenite/wacke
Lithic arenite/lithic wacke

Chemical Sedimentary Rocks

- Limestones
- Chalk
- Oolitic limestones
- Dolomites/dolostones

$CaCO_3$

$CaMg(CO_3)_2$



Siliceous Sedimentary Rocks

- Nodular Chert
- Bedded Chert – radiolarian chert

Radiolaria - http://www.palaeos.com/Eukarya/Units/Rhizaria/Images/Radiolaria.jpg

Evaporites

Coal

Anthracite: high grade coal

Depositional Processes and Their Results

Bedding
Lamination

Formation: must be mappable at a scale of 1:24000

Cross -bed

Mudcracks

Transportation by Rivers

- Bed load
- Suspended load
- Dissolved load

Alluvial Fans and Delta

Nile River delta

Alluvial fan, Mojave Desert

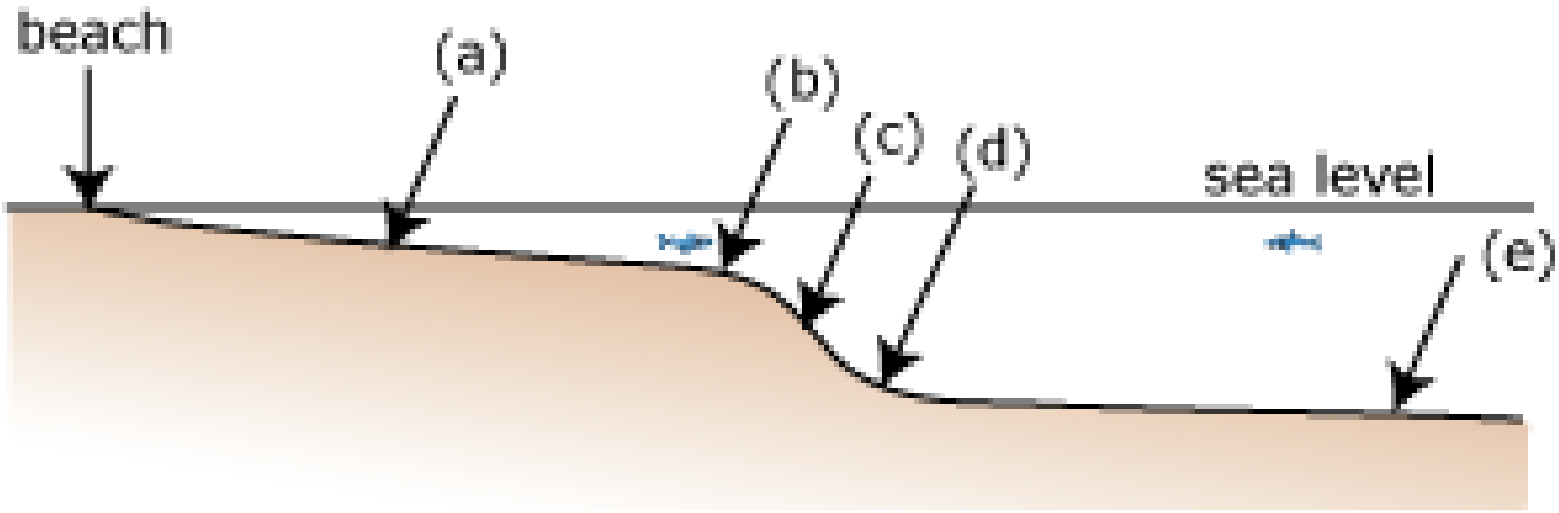
Other Environments of Deposition

Beach

Barrier Island

Dunes

Continental Margins



Turbidity Currents and Graded Beds