

# Lesson Objective:

You will be able to list and explain the steps of sedimentary rock formation.

# Sedimentary Rocks:

- When Earth's sediments are pressed together over time, sedimentary rock forms.





Picture by Jean-Christophe BENOIST

# Garden of the Gods, Colorado



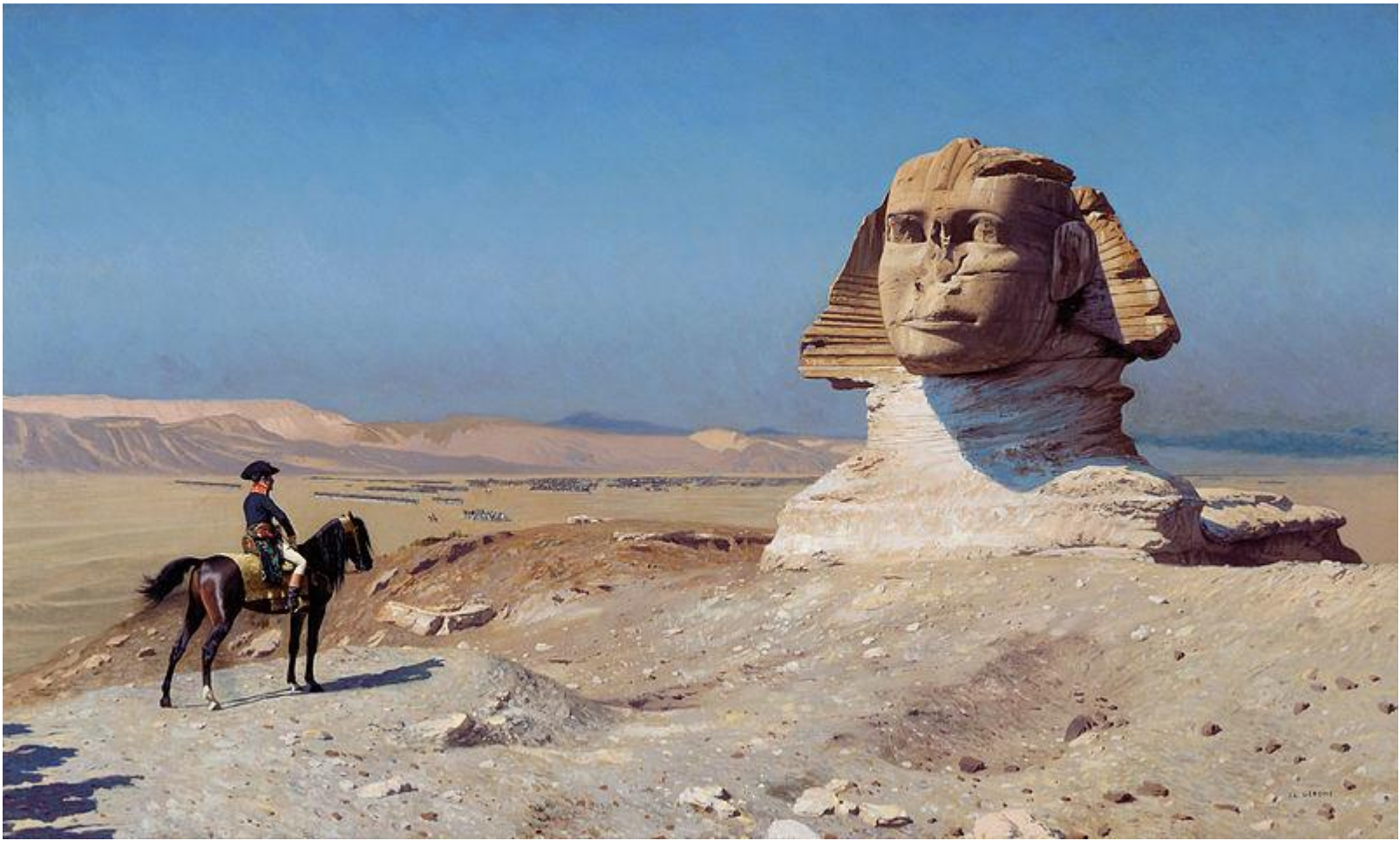


Over 80% of Earth's  
surface is made up of  
sedimentary rock!

# Steps of Forming Sedimentary Rocks

# Step 1: Weathering

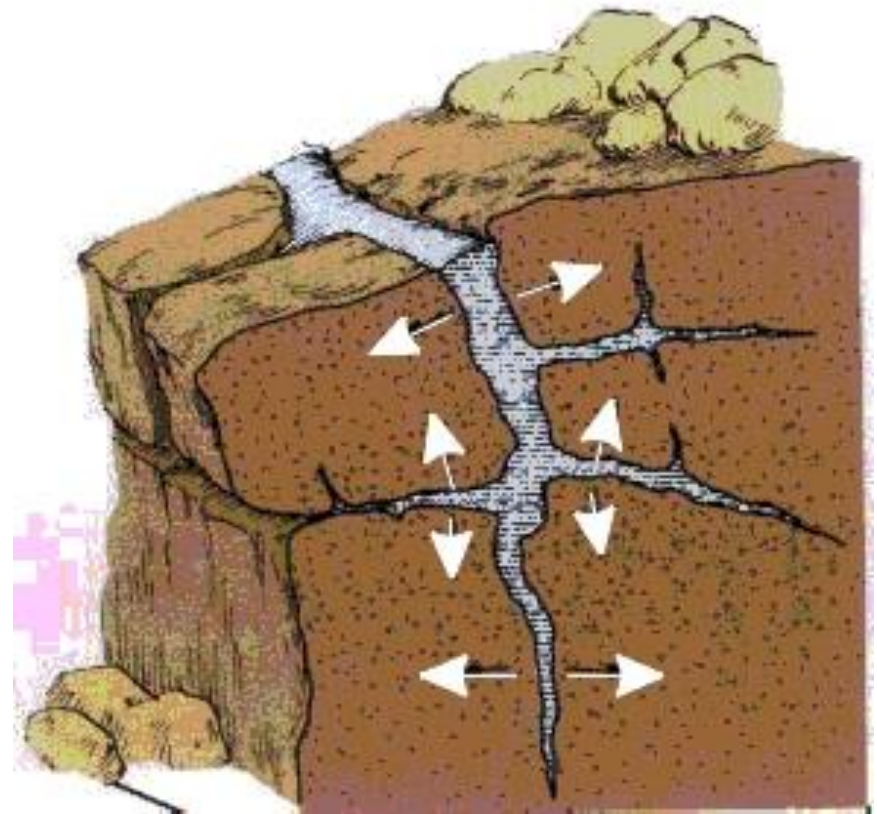
- Weathering breaks down rock into “sediment”.





# Weathering:

- Weathering is the process where rock is broken down into smaller and smaller pieces.
- There is *no movement* in weathering.



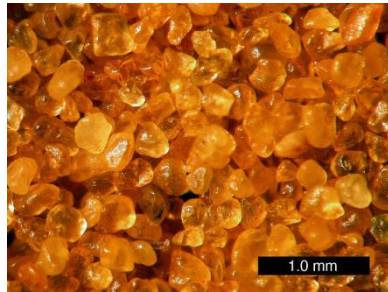
# Step 2: Sediment

- Weathering creates *sediment*.



# Sizes of sediments:

- Pebbles / Gravel
  - Sand
    - Silt
      - Clay



# Step 3: Erosion

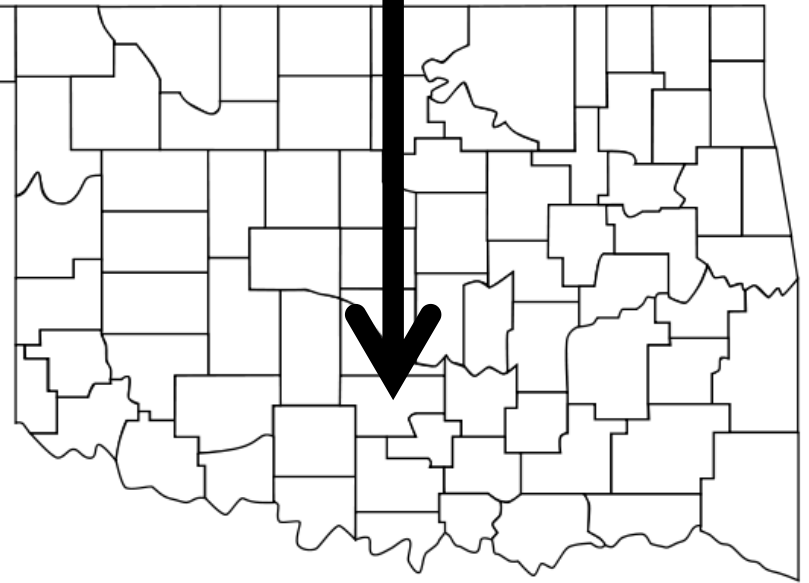
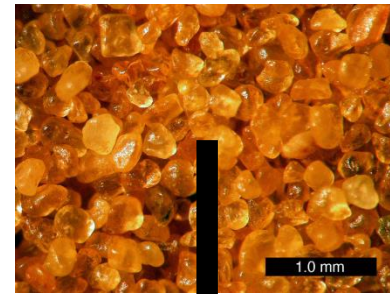
- Erosion moves the sediment to a new location.
- Transported by wind, water, or gravity.





# Step 4: Deposition

- Deposition is when sediment settles in a new location.
- More and more sediment will be deposited on top of each other.



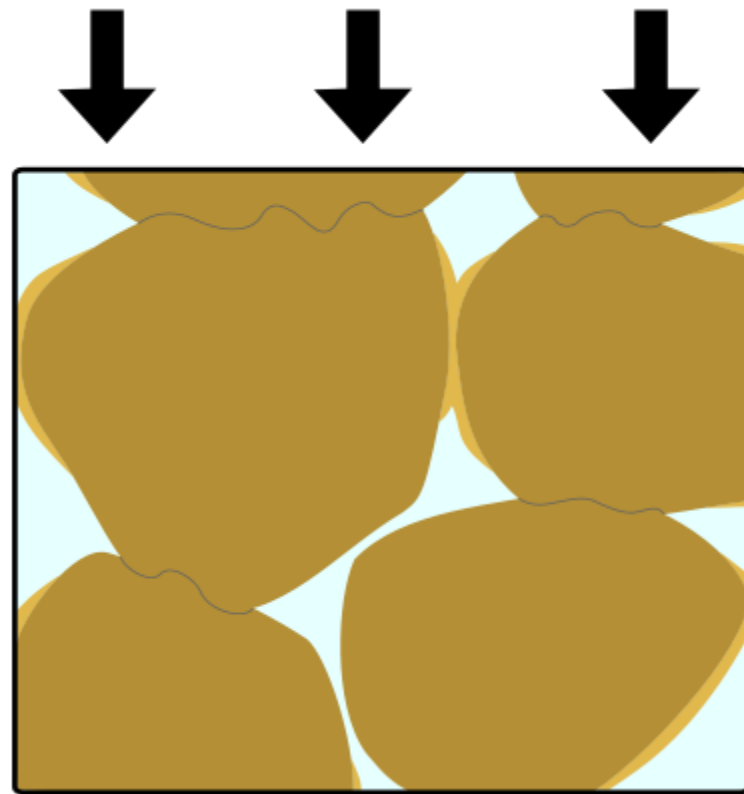
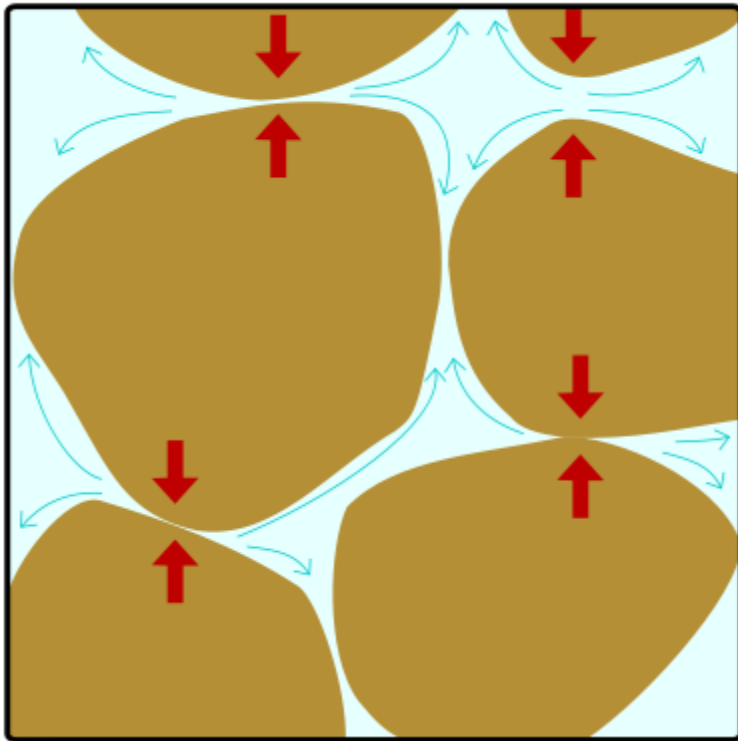
# Step 5: Compaction

- Sediments are **PRESSED TOGETHER** under many layers of sediment in a process called **COMPACTION**.

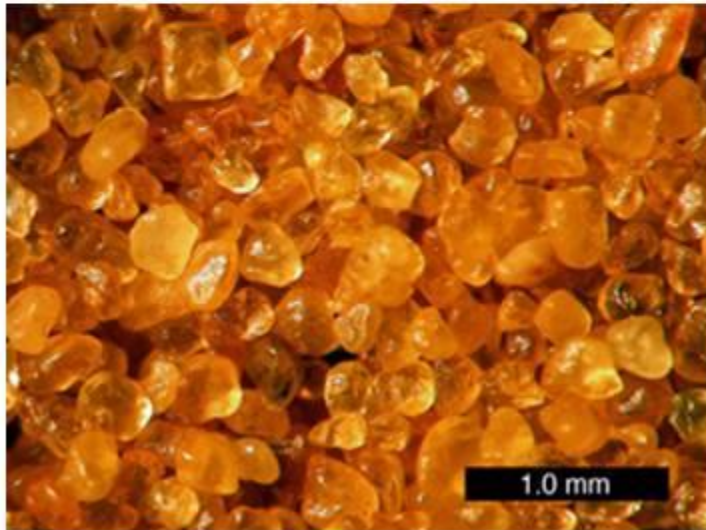
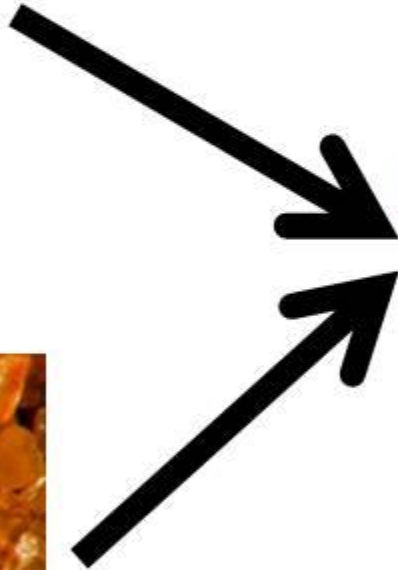


# Step 6: Cementation

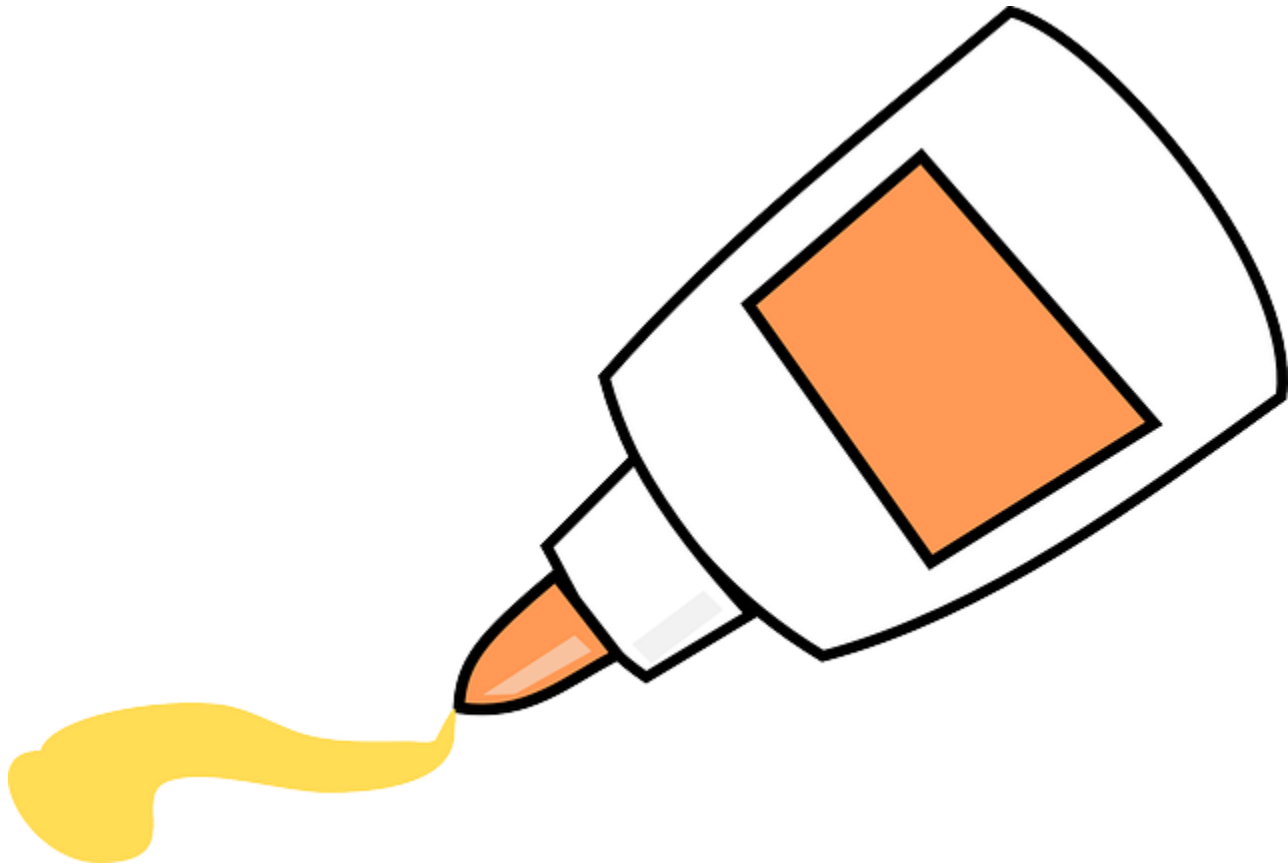
- Sediments stick together.







# Gluing in the Steps



# Fossils:

- If you find a fossil it is definitely a sedimentary rock!
- The organism was preserved by the pressure of the sediments!



What is the 1<sup>st</sup> step of sedimentary rock formation?

A – Erosion

B – Compaction

C – Weathering

D - Deposition

What step is when sediment moves to a new location?

A – Weathering

B – Erosion

C – Deposition

D – Cementation

Weathering creates what?

A – Compaction

B – Sediment

C – Sedimentary rock

D - Cementation

What are the final two steps of sedimentary rock formation?

A – Compaction & Deposition

B – Compaction & Cementation

C – Cementation & Deposition

D – Deposition & Erosion

What step is when sediment settles at a new location?

A – Weathering

B – Erosion

C – Deposition

D – Compaction



# Partner Practice