

Module 1
Lessons 8 -11

Module 1 Anchor Phenomenon: Formation of the Grand Canyon's Features Essential
Question: How did the Grand Canyon's features form?

Focus Question 2: How are Earth's rock layers uncovered?

After rock has been weakened and broken up by weathering, it is ready for erosion.

- **Erosion** happens when rocks and sediments are picked up and moved to another place.
- **Natural forces**, such as rain, ice, wind, and gravity move weathered material.
- The force comes from moving air, moving ice, moving water, or gravity.
- **Weathered** rock that is moved by wind, water, ice, or gravity is called **sediment**.

Erosion by wind, water, and ice:

- **Heavier** sediments, like pebbles and rock, are **harder** to move or sometimes do not move at all.
- **Lighter** sediments, like sand, is **easier** to move.
- A **large amount of water**, like a river, moves a lot **more** sediment than a **small amount of water**, like rainfall. The **faster** the water moves, the **more erosion** will occur.
- A **strong wind** will move **more** sediment than a **soft wind**.
- Glaciers can move very large rocks. As the ice of the glacier moves downhill, it pushes and pulls earth materials (sediments) along with it.

Erosion by gravity:

- Sometimes rocks and soil move downhill in large volumes called **landslides and rock falls**. This happens when rocks or soil becomes unstable and can no longer resist the downward force of gravity.