Objective

By the end of this lesson, you will be able to understand the processes of weathering, erosion, deposition, and mass movement and how they shape the Earth's surface.

Materials and Prep

- Pen and paper for notes
- Access to outdoor space (backyard, park, etc.)
- No prior knowledge needed, just a curious mind!

Activities

- **Weathering Investigation:** Go outside and observe rocks or soil in your surroundings. Take notes on any visible signs of weathering such as cracks, color changes, or crumbling.
- **Erosion Experiment:** Create a mini stream using a hose or watering can in your backyard. Observe how the water erodes the soil and discuss the effects of erosion on the landscape.
- **Deposition Diorama:** Use sand or soil to create a small model landscape. Pour water over the landscape to simulate deposition. Observe how sediment is deposited in different areas.
- **Mass Movement Simulation:** Use a tray of sand or soil to demonstrate different types of mass movement such as landslides or mudflows. Tilt the tray to observe how gravity causes the movement of material.

Talking Points

- "*Weathering is the process by which rocks and soil are broken down into smaller pieces over time due to various factors like wind, water, and temperature changes.*"
- "*Erosion occurs when weathered material is transported by natural agents like water, wind, or ice, reshaping the Earth's surface.*"
- "*Deposition is the process where eroded material is deposited in a new location, often creating landforms like deltas, beaches, or alluvial fans.*"
- "*Mass movement refers to the downhill movement of material under the influence of gravity, which can occur slowly over time or suddenly in events like landslides.*"