

Project FOCUS
Best Lessons
FIFTH GRADE

Title of Lesson: Weathering vs Erosion

Theme: Physical Science

Unit Number: [Click here to enter text.](#)

Unit Title: Earth's Surface Features

Performance Standard(s) Covered (enter code):

S5E1 B- Students will identify and find examples of surface features caused by destructive processes.

S5CS1-Students ask questions and write observations.

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Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Weathering, Erosion, Deposition, Destructive processes

Learning Activity (description in steps)

Abstract (limit 100 characters): This activity tries to teach students the difference in weathering and erosion using materials that allow students to see changes in real time.

Details: Break students up into groups of 4 or 5. At each table, place a bowl with sugar cubes in it, a water dropper, a paper plate with granulated sugar, and straws for every student. First, talk about what weathering is. Then tell the students that the sugar cube is our "rock". Tell them to take turns dropping water on the sugar cubes until they see changes. Once the sugar cube is saturated, the sugar should break down into smaller parts. This is weathering. Ask students to write down their observations. Next on to erosion. Ask them the basic definition of erosion. Once they have this figured out, allow them to use the straws in order to move their "sediment," or granulated sugar around the plate using their straws. Tell them to write down their observations of how hard they had to blow through the straw and how far the sugar moved. Now give each table one more sugar cube and see if they can move it by blowing through the straw. Get them to write down their observations. They should notice that it is much easier to move smaller sediment. This allows them to understand the order of steps in the process. Weathering must occur first in order to break down the rocks so that it is easier for them to be transported.

Materials Needed (type and quantity): Sugar Cubes- 1 per student; Granulated Sugar- 2 tbsp per group; Plastic Bowls- 1 per group; paper plate- 1 per group; Straws- 1 per student; Water droppers- 1 or more per group

Notes and Tips (general changes, alternative methods, cautions): Blowing through straws at small particles can lead to a huge mess. Be sure to coach the students on how to blow very softly at first so that the granulated sugar does not go flying off the paper plate.

Sources/References:

- 1) [Click here to enter text.](#)
- 2) [Click here to enter text.](#)
- 3) [Click here to enter text.](#)