

Target Grade Level: 5th

Unit Title: Earth's Surface Features

Title of Lesson: Erosion and Weathering Activity

Georgia Performance Standards:

S5E1.

b. Identify and find examples of surface features caused by destructive processes

- Erosion (water- rives and oceans,wind)
- Weathering

Materials:

- Sand
- Smalls cups for each child
- Water
- Straws that have been cut in half, enough for each child
- Wax Paper cut into 18inX18in portions
- Newspaper
- Droppers, they can share if needed

Safety Concerns:

- Ask the students not put any of the materials in their mouth
- Ask them not to play with the straws or use each other straws for sanitary reasons
- The students might blow sand at each other, inform them that this is unsafe

Procedures:

1. Cover the student's desk with newspaper so that the sand does not get spilled everywhere.
2. Place a dropper, a small cup of water, wax paper, and half a straw on each of the student's desks.
3. Ask the students not to touch the materials until told to do so and place a handful of sand on each of the student's desks.
4. Inform the students to read the section of their book regarding weathering and erosion while handing out the materials.
5. After the materials have been passed out and the students have read the book, ask them the difference between weathering and erosion as well as what causes each of these events.
6. After the students have showed that they understand the difference, allow them to demonstrate their knowledge using the materials.
7. Ask the students to build a mountain without using the water.
8. After they have completed this task, ask them how they did it (they should answer by blowing on the sand with their straws, stimulating wind) and ask them weather building the mountain using wind was erosion or weathering.
9. Then ask the students to blow harder on top of their mountain.

10. Ask the students what happened to their mountain. It should have become wider and have holes in it.
11. Ask the students whether they believe this was weathering or erosion and why.
12. Explain that because the mountain has been broken down by wind, weathering has occurred.
13. Now, ask the children to place drops of water on to their sand using the dropper and water provided.
14. Ask the students to make observations regarding how the sand has changed, and whether this would affect the land feature. Ask them where this might take place (ex. rivers and oceans) and what might form because of it (ex. sand dunes). Lastly, ask them whether these formations are due to erosion or weathering.
15. After the activity has been completed, allow the students to clean up their "lab station."
16. Lastly, allow the students to complete a worksheet about weathering and erosion using the knowledge they have just obtained, this should test whether or not the student obtained the material.

Notes:

- Inform the students not to blow too hard over the mountain or it could get in their eyes during the experiment

Resources:

- Jennifer Bell, 5th Grade Teacher, Gaines Elementary School