

Wind erosion

4th Grade

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Benchmarks:

- ES-8: Describe how wind, water, and ice shape and reshape Earth's land surface by eroding rock and soil in some areas and depositing them in other areas producing characteristic landforms (e.g. dunes, deltas, glacial moraines)
- ES-10: Describe evidence of changes on Earth's surface in terms of slow processes (e.g. erosion, weathering, mountain building, and deposition) and rapid processes (e.g. volcanic eruptions, earthquakes, and landslides)

Materials:

- Science journals
- Deep Metal pans (1 per group)
- Straws (1 per person)
- Sand (enough to fill each pan)
- Plastic houses and the like (to cover with the sand)

Target Concept:

This lesson will allow the students to witness how wind can erode the Earth's surface and the importance of it from a human standpoint.

Initial Introduction:

This lesson is a continuation of other erosion lessons so review previously learned erosion concepts. The teacher can review the forms of erosion and ask the students how erosion affects humans.

Procedure:

1. Fill the metal pans with sand and place the plastic houses and such at different points within the pan.
2. Give each group a pan and a set of straws.
3. Have the students blow the sand with the straws and see what happens.
 - a. Have them see if they can cover the plastic houses
4. Ask the students why it's important to know about erosion.
5. Ask the students other examples of how erosion impacts humans.
6. Ask the students what they could do to their system to lessen the impact of wind erosion on the houses

Target Observations:

- Wind can erode the Earth's surface
- Erosion can impact human life
- There are ways to lessen the effects of wind erosion

Final Target Concept:

Wind can erode the Earth's surface and affect human life. There are ways to lessen the effects of erosion.

Summary & Discussion:

The teacher should review the forms of erosion and the experiment. The teacher can ask the students to write-up their ideas for an experiment to lessen the impacts of erosion as well as write-up their observations and procedures from this experiment.