Power of Water

Grade 4

Teacher's Guide

Lake Erie Nature & Science Center

Description

In this wet, wild, inquiry-based field trip students will investigate how Earth's surface has been shaped by water. Students will get their hands wet using stream tables to create their own landforms. *Available in selected weeks in January and early February.*
Length: 90 minutes -2 hours. **Adult chaperones recommended:** 5

Content Standards

Subject	Gr	Standard	Objective/"I can" Statements
Earth/Space Science	4	• Earth's surface has specific characteristics and landforms that can be identified • The surface of Earth changes due to weathering • The surface of Earth changes due to erosion and deposition	• I can explain how weathered materials move through the process called erosion. • I can identify the factors that affect erosion and deposition. • I can compare and contrast erosion and deposition. • I can explain how Earth's surface wears away through the process of weathering. • I can recognize the factors that cause weathering.

Pre-Trip Activities at School

Vocabulary

basin
channel
delta
deposition
erosion
flow rate
meander
landform
volume
oxbow lake
particle
peninsula
plunge pool
sediment
streambed
substrate
undercutting

Books

- Erosion: Changing Earth's Surface by Koontz. Picture Window Books, 2007.
- Rivers by Llewellyn & Feldman. Kingfisher, 2014.
- U.S. Landforms by Dana Meachen. Scholastic, 2012.
- Weathering and Erosion and the Rock Cycle by Joanne Mattern. Rosen Publishing Group, 2006.

Other Activities

- Investigate human vs. natural causes of erosion. (Natural: wind & water; Human: agricultural and construction practices).
- Investigate Ohio landforms.

Post-Trip Activities at School

- Look at Ohio landforms that were created by liquid water vs. ice and glaciers.

Extension Activities

- Use Landsat data to research and locate a specific landform that formed through erosion or deposition.
- Read: Out of the Dust by Karen Hesse. Great Source, 2009.