# **Cape Cod National Seashore**



## Parks as Classrooms—Weathering and Erosion, Grade Bands 3-5



**Grade Level:** Upper Elementary

State Standard: Earth and Space Sciences 4-ESS

ESS<sub>1</sub>

#### **Learning Objectives:**

Students will learn how land forms and rocks can change through different types of weathering.

Students will learn the sediment cycles of beaches (erosion and deposition).

## Vocabulary

Weathering

Erosion

Deposition

### Activity 1—Rocks Rock!

Find a rock nearby your house or at a local beach. Spend one full minute taking it in with your senses—the colors, the textures. Write down your answers to three questions: 1) What do you observe about the rock? Describe it in detail. 2) What do you wonder about the rock? How do you think it became the size or shape or color that it is? 3) Do you see any signs of weathering on your rock and what type of weathering do you think it was?

Side Trip: Visit Doane Rock off of Doane Road in Eastham, and look for signs of change with the Weathering Worksheet



#### Activity 2—Can't Stop the Flow

Get three plastic cups and fill the first with sand, the second with a mixture of sand and soil, and the third with sand/soil/tiny pieces of grass or vegetation. Dampen each cup and put in the fridge to chill. Then place on a tray. With a partner or a family member, predict which one will wash away the most and why? Put the three cups upside down on a tray that can hold a lot of water. SLOWY pour water onto each soil type and record what happens. How does this relate to soils on the Cape—which kinds will erode slower?

Side Trip: Visit Nauset Light Beach (or any pearby Atlantic beach), find the different parts of the shore, and

**Side Trip:** Visit Nauset Light Beach (or any nearby Atlantic beach), find the different parts of the shore, and compare the sediment grain sizes using the Sediment Beach Zones Worksheet.