ADVENTURE BEGINS | FIFTH GRADE | S5E1. CONSTRUCTIVE & DESTRUCTIVE PROCESSES

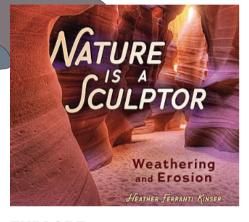
# **CONNECTIONS TO SCIENCE GUIDES**

GEORGIA YOUTH SCIENCE & TECHNOLOGY CENTERS, INC.

**NATURE IS A SCULPTOR: WEATHERING AND EROSION** 

BY: HEATHER FERRANTI KINSER

CAN'T FIND THE BOOK? READ-ALOUDS ARE AVAILABLE ON YOUTUBE.



### **ASK**

- What is weathering?
- What is erosion?
- What is deposition?
- How does nature shape the environment?
- Have you ever thought about being a civil engineer?

## **EXPLORE**

#### **CANDY WEATHERING & EROSION**

#### **Materials:**

- Plate
- Bag of Skittles or other hard candy
- Cup of water

#### **Directions:**

- Observe the physical attributes of your candy rocks.
- Using your fingers, scrape two candy rocks together to model the process of mechanical weathering. Look for the evidence of weathering.
- Using your finger, drip 4-5 drops of water on top of a candy rock. Look for evidence of chemical weathering.
- To model erosion, place 5-6 candy rocks around the edge of your plate and add water to cover the bottom of the plate. Look for evidence of erosion.
- Blow gently across the water on the plate. Let the water settle and look for evidence of deposition.
- As you are experimenting, think about:
  - How long do these processes take in nature?

#### **Fun Facts:**

- Water is the primary agent of erosion.
- Human activities such as deforestation, mining, and construction can influence erosion.



### **EXPLAIN**

#### **WEATHERING & EROSION**

Day after day, the rocks on the surface of the earth are weathered by water, ice, wind, and chemicals. Natural forces like water, wind, and gravity help transport these smaller rocks and soil to other places during erosion. When these materials are deposited, or settled, in a new location, it is called deposition.



# EXTEND

#### **PROVIDENCE CANYON STATE PARK**



Providence Canyon State Park in Lumpkin County features massive gullies caused by poor farming practices during the 1800s. Dubbed Georgia's "Little Grand Canyon" the pink, orange, red, and purple soils are a sight to see.

# STEM CAREER CIVIL ENGINEER

A civil engineer designs and builds structures like buildings, bridges, and roads. At work, civil engineers can improve travel, create erosion prevention plans, and protect communities from natural disasters. If you are interested in designing and building structures, being a civil engineer might be for you!





# **BACKGROUND**

The Georgia Youth Science and Technology Centers, Inc. provides quality programs for teachers of STEM subjects that improve the teaching and learning process at the kindergarten through eighth grade levels. We present programs that change students' perceptions and inspire an appreciation for science, technology, engineering, and mathematics subjects.

# **ABOUT US**

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