# CONSERVANCY

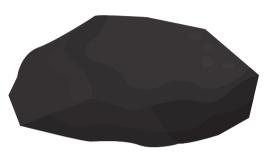
FOR CUYAHOGA VALLEY NATIONAL PARK

-CUYAHOGA CONNECTIONS—
JOURNAL VOL. 3

Geology

# Types of Rock

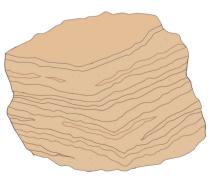
<u>Igneous</u> rocks are formed when magma or molten rock cools.





Metamorphic rocks form when rocks are subjected to high heat and pressure.

Sedimentary rocks are formed from sediments, such as sand, gravel, or dirt subjected to pressure for long periods of time.



# Weathering

Weathering is the process that takes place as rocks are broken down into smaller pieces. Weathering can be caused by water, air, chemicals, plants and animals.

<u>Mechanical Weathering</u> is the process of breaking rocks into small ones through frost, ice, plant roots, running water or the heat from the sun.

<u>Chemical Weathering</u> involves substances, such as acids, changing a rock's physical properties, such as shape or color.

Draw a plant growing through a rock, causing the rock to split. What kind of weathering is this?



### Rocks and Ice

If a material is <u>permeable</u>, it means water and liquid can pass through it.

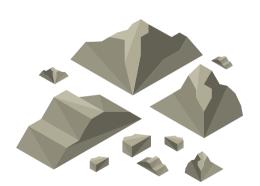
Rocks are <u>porous</u>, meaning they have small spaces in which water and air can pass through. Rocks are permeable!



If the air temperature drops below 32 F, the water inside the rock's pores and cracks will freeze.

Remember: water expands when frozen!

This expansion causes cracks in the rock to widen. Eventually, as the process of freezing and thawing continues, the rock will split into angular fragments.



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### **Erosion**

Erosion is the process of natural forces, like wind, water or gravity moving weathered rocks.

Weathering and erosion are similar, but not the same.

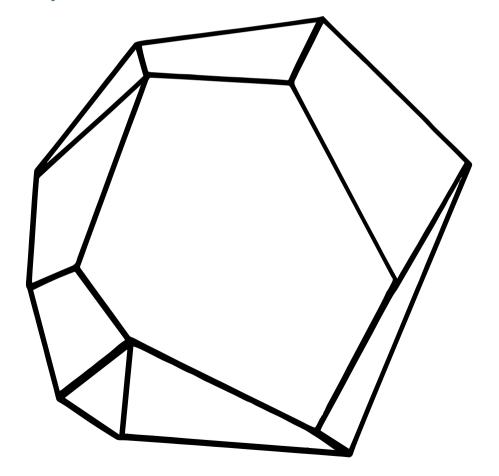
Weathering breaks down the rocks, and erosion is the process that moves the weathered rocks away.



# Create your own fossil!

Fossils are the preserved remains or traces of ancient life. Even ancient tracks, trails, and burrows are fossils. Fossils are mostly found in sedimentary rocks. Sediments may cover plant and animal organisms and preserve their original remains or leave an imprint behind.

#### Draw your own fossil in the rock below!



# **Ecosystem Exploration**

Find a rock in your backyard, along the sidewalk, or even in CVNP! What do you notice? What do you wonder about it? What does it remind you of? Use this page to write or draw your observations. Make sure you return your rock to the wild!

# **Creative Writing**

Imagine you are leading a cave expedition team and make a geological discovery! What is your adventure like? Who is on your discovery team? What do you discover and how do you classify it?

