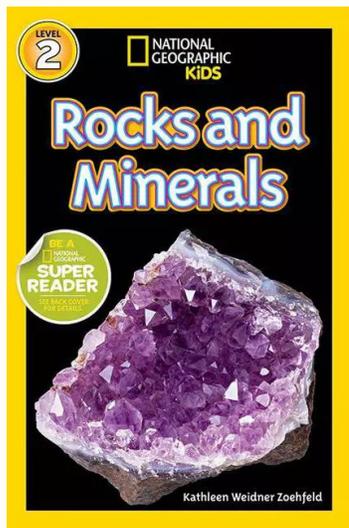




# NATIONAL GEOGRAPHIC READERS: ROCKS AND MINERALS

BY KATHLEEN WEIDNER ZOEHFELD



**Today students will learn how to use non-fiction books to learn more about a topic.**

Students will learn how readers get the most out of non-fiction using text features. Using the activities provided students will learn the characteristics of rocks, spend time outside collecting rocks, and make a rock museum to show what they have found.



# BACKYARD GEOLOGY

Find, investigate, and label rocks and minerals in your neighborhood.

## MAKE AN EXPLORATION BAG

Create a toolkit for exploring the plants, animals, and nature in your neighborhood. Include magnifying glass, small gardening tools such as a trowel and claw, measuring tape, a camera, flashlight, plastic bag for collecting, a weatherproof notebook, and pens and pencils.



## ROCK MUSEUM

Collect and label using the rock names, and rock characteristics below. Then display your rocks to create a mini rock museum.

### ROCK NAMES CHART

					
granite	basalt	pumice	peacock bornite	aquamarine	barite
					
marble	slate	sandstone	chrysocolla	dalmation rock	honey calcite
					
agate	amazonite	amber	gypsum selenite	jade	citrine
					
alabaster	amethyst	apatite	leopard jasper	lime aventurine	orange calcite



## ROCK INVESTIGATION

Collect and identify rocks from your neighborhood. When you get home, sort the rocks by type or appearance. How many different kinds can you find? Try a different route and see if you find different types of rocks. Use your eyes, hands, and nose to investigate the soil in your backyard. Is it moist? Sandy? Muddy? Does it have any particular odor? What grows best there?

## ROCK CHARACTERISTICS



### COLOR

Rocks come in many colors, and sometimes they have minerals of different colors in them. Study your rock. What colors can you find in it? Be specific.



### STREAK

Streak is the color left behind as the rock is scratched across a surface. Scientists use a streak plate (piece of unglazed porcelain). You can also see if your rock draws on a piece of paper. Only soft rocks do this.



### LUSTER

Luster describes how mineral reflects light. Use these terms: glassy, metallic, greasy, pearly, silky, earthy.



### CLEAVAGE

Cleavage describes the way a rock tends to break. Describe whether your rock is a thin layer, thick layer, or chunk. Record if it has smooth, bumpy, or sharp edges.



### HARDNESS

Test the hardness by trying to scratch the rock with your fingernail, a penny, or a nail. If these don't scratch the rock, try scratching glass with the rock.



### CRYSTALS

Crystals, or grains, in a rock can be visible or invisible. If you can see the crystals, describe their shape, size, and color. Also record if you can see air bubbles.



## IDENTIFYING ROCKS

	COLOR	LUSTER	HARDNESS	STREAK	CLEAVAGE	CRYSTALS
ROCK #1						
ROCK #2						
ROCK #3						
ROCK #4						
ROCK #5						
ROCK #6						

# WE HOPE YOU ENJOYED THESE ACTIVITIES!



For more great resources and video read alouds scan the QR code using the camera app on your phone to visit [witschicago.org/witsk-online](https://witschicago.org/witsk-online)

