 **FUN**damental
Experiments 



Rocks and Minerals



by Ellen Lawrence

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Let's Investigate Rocks and Minerals

Rocks are everywhere. You can find them in many different places—in a backyard, in a garden, at the foot of a mountain, or at the beach. Yet no matter where they come from or how different they look, all rocks are made up of solid substances called **minerals**. Inside this book are lots of fun experiments about rocks and minerals. So grab a notebook, and let's start investigating!



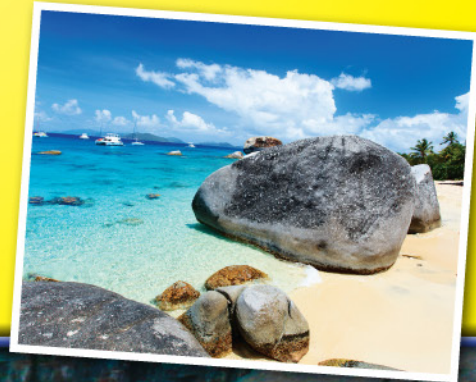
Check It Out!

Tall mountains, deep **canyons**, and steep cliffs are all made of rock. Different things you see in towns and cities, such as buildings, may be made of rock, too. In fact, you probably see rock every day—sometimes without even knowing it!

**In your notebook, make a list of all the places you see rock.
Answer the following questions and write down the things you
observe about the rocks you've spotted.**



- Where did you see the rock? For example, was it on the ground or part of a building?
- Describe what the rock looked like.



Are all rocks the same?

In this first investigation, you will collect rocks. Then you will closely examine them to observe their different **properties**—just like a scientist called a **geologist** would. Let's investigate to find out if all rocks are the same.

You will need:

- Six rocks (about the size of ping-pong balls)
- A black marker
- A magnifying glass
- A notebook and pencil

1

Find six rocks. You can look for rocks in a backyard, or park, or at the beach.

2

Place the six rocks on a table. Use a marker to label them 1 to 6.



3

Examine the first rock. Use the magnifying glass to get an up close look. Think about the following questions.

- ▶ **What words describe the feel of your rock? For example, is it rough, crumbly, smooth, or sharp?**
- ▶ **What shape is the rock?**
- ▶ **What colors do you see in the rock?**
- ▶ **Is the rock shiny or dull?**
- ▶ **What do you see when you look at the rock with a magnifying glass?**



4

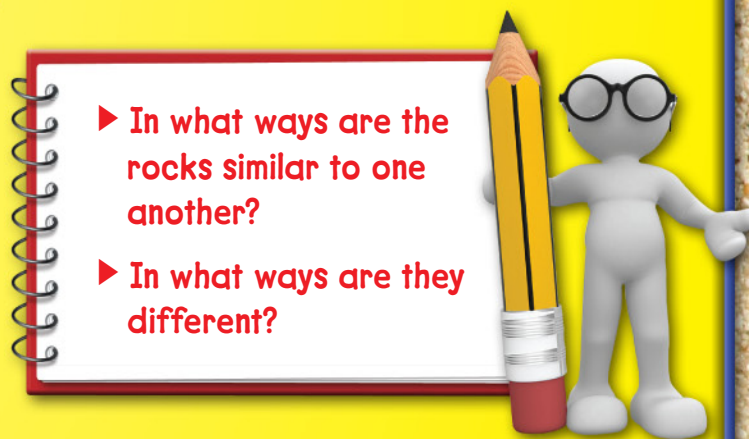
Draw a chart like this in your notebook. Then record everything you observed about the rock in the chart.

Rocks examined	How does it feel?	Shape	Colors	Shiny or dull?	What I can see with a magnifying glass
Rock 1					
Rock 2					
Rock 3					
Rock 4					
Rock 5					
Rock 6					

5

Now examine the other five rocks and record your observations in the chart.

- ▶ **In what ways are the rocks similar to one another?**
- ▶ **In what ways are they different?**



(To learn more about this investigation and find the answers to the questions, see pages 20–21.)

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Read More

Lawrence, Ellen. *What Is the Rock Cycle? (Rock-ology)*. New York: Bearport (2015).

Owen, Ruth. *Science and Craft Projects with Rocks and Soil (Get Crafty Outdoors)*. New York: PowerKids Press (2013).

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Learn More Online

To learn more about rocks and minerals, visit
www.bearportpublishing.com/FundamentalExperiments

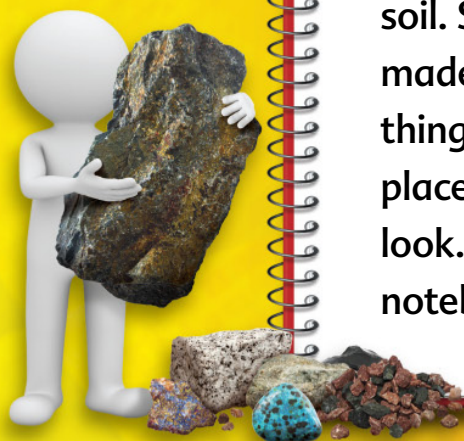
About the Author

Ellen Lawrence lives in the United Kingdom. Her favorite books to write are those about nature and animals. In fact, the first book Ellen bought for herself, when she was six years old, was the story of a gorilla named Patty Cake that was born in New York's Central Park Zoo.



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Rocks and Minerals



They are scattered along the beach and are buried in the soil. Some are smooth and striped, while others can be made into sparkling jewelry. What are these amazing things? Rocks and minerals! They can be found in many places and in many forms, but now it's time to take a closer look. Inside this book are lots of fun experiments. So grab a notebook and start investigating the solid world of rocks!

Air Color Dirt Light Liquids and Solids

Magnets Motion Rocks and Minerals Sound Water