

# A Career in Geology

Geology is the study of rocks and minerals. The job of a geologist is to study the earth beneath our feet, including rocks, minerals, and other materials in the ground. Sometimes, they can use what they know to predict disasters like earthquakes, volcano eruptions, or landslides! They might also use what they know about rocks and minerals to help people build buildings with strong foundations or find valuable materials underground.

## What Is a Rock?

A rock is a collection of mineral grains that either melt together or become cemented together over time. All rocks are made up of minerals and are classified by geologists into one of three types of rocks: igneous, sedimentary, and metamorphic rocks.

- [Why Should We Study Rocks?](#) Geologists study rocks to learn about what Earth was like in the past and help engineers to build safe structures today.
- [Interactive Rock Cycle](#): This interactive activity can help you learn how to tell the different types of rocks apart.
- [Rocks and the Rock Cycle](#): There are three different types of rocks, and each forms in a different way.
- [The Rock Cycle](#): This diagram shows the long and slow journey of rocks changing over the years.

## What Is a Mineral?

Minerals are naturally occurring solid substances that are made of a single element or a combination of elements. Earth contains thousands of minerals, all of which are solid, are not made of living material, and have a specific chemical structure.

- [Using Characteristics of Minerals to Identify Them](#): Minerals are classified based on different properties, such as how hard they are or what color they are.
- [Types of Minerals](#): This page includes a detailed video about minerals as well as fun facts to help you along your journey to becoming a geologist!
- [All About Minerals](#): Look at pictures and learn about the details of a few of the most common minerals.
- [Minerals, Crystals, and Gems](#): This lesson from the Smithsonian can introduce you to minerals to start you down the path to learning more.
- [Minerals All Around Us](#): Minerals are all around us and are the building blocks that make up rocks. This document makes it easy to learn more about how they're formed.

## More Resources

Learning the basics of what makes up rocks and minerals is only a small part of what geologists do. You can learn more about how rocks and minerals are used in our everyday lives and maybe even inspire a lifelong love of geology.

- [Rocks and Minerals: Everyday Uses](#): Rocks and minerals aren't just pretty things you see while you're out for a walk. They can be useful, too! You probably use them in your everyday life without even realizing it.
- [Investigating Rocks and Sand](#): This detailed lesson explains how to learn about rocks and sand in the classroom so your whole class can find out more about the rocks that make up our world.
- [The Rock Cycle: A Hands-On Simulation](#): This fun activity makes it easy to learn about the rock cycle using crayons.
- [Rocking the Rock Cycle](#): In this activity, you and your friends can learn about the rock cycle, play games, and fill out worksheets to help you remember what you've learned about rocks.
- [Rocks and Minerals](#): Learn some fun facts about rocks and minerals!
- [Geology: Rocks and Minerals](#): This interactive page teaches you about the three types of rocks and where you can find them in your home. When you've gone over the whole page, you can quiz yourself on what you've learned.
- [Ready Jet Go! Geology](#) : This PBS Kids video features astronomer Amy Mainzer to help you learn more about rocks.
- [Geology 101](#): Dig into rocks with this page from National Geographic that gives you a detailed overview of geology as a science.
- [Discover the Fun of Backyard Geology](#): Backyard geology is a great hobby! Hands-on learning can be better than reading things out of a book, and you don't even need much to get started learning about geology in your yard.
- [Rocks and Minerals](#): Explore videos and pictures of rocks and minerals to help you learn more about what they are and how we use them.
- [Geology Scavenger Hunt](#): Print this out and take it outside with you on a walk, then take a closer look at the rocks and landscapes of your neighborhood.
- [How Geology Affects Your Everyday Life](#): Everything is impacted by geology, even if you don't think about it.
- [Is It a Rock or Mineral?](#) In this activity, you can use candy and magnifying glasses to learn more about how rocks are classified.
- [The Amazing Mundo!](#) Follow along with this interactive comic to learn about how rocks and minerals are used in our everyday life.
- [Learn to Grow Crystals](#): Use evaporation to create intricate crystals in this fun activity.
- [The Geology of the Grand Canyon](#): When you look at the Grand Canyon, you can see millions of years of geology in action!
- [Facts About Rocks and Minerals](#): Here are some fun facts with helpful visuals and even some poetry to help you learn more about rocks and minerals.
- [Rocks and Their Uses](#): This lesson is a great way to introduce you and your friends to the different types of rocks and what they're used for.
- [How Are Rocks the Same, and How Are They Different?](#) Try out this activity to learn more about the similarities and differences between rocks.

- [Three Types of Rocks](#): Watch the video, and then try out this activity in which you identify rocks.