Geologists investigate Earth in order to understand the innerworkings of our planet. Once they have an understanding of Earth’s composition and how it has changed over time, they apply this knowledge in different ways. Geologists may specialize in Earth processes like earthquakes and volcanic eruptions so they can guide the development of communities. Some Geologists work to identify and supervise sites for oil, natural gas, and groundwater drilling. No matter their focus area, Geologists can be found in offices and on job sites around the world as they seek to better understand the planet we live on.

EVALUATE YOUR INTEREST

☐ I enjoy being outdoors.

☐ I enjoy learning about nature and our planet.

☐ I am interested in learning more about sustainability.

☐ I enjoy solving puzzles.

☐ I like working with my hands and using technology.
Geologist

STUDENT ACTIVATION (CONTINUED)

How does this career affect me?
You may be surprised to learn the extent to which Geologists contribute to our daily lives. For instance: When water isn't available in above ground sources, Geologists help find sources underground—so the water in your community could be available thanks to a Geologist!

Geologists also contribute to transportation. They help find the petroleum used to fill cars and buses, and they assist in road development. Before roads are laid, Geologists ensure that the land and rocks below are safe and sound.

Geologists support technology, too! Did you know your cell phones and laptops rely on minerals? Minerals are used in every mobile device, and Geologists help source these materials and ensure that we don’t overuse the sources we have found.

What are some other similar careers?
- **Engineering Geologists** combine their knowledge of geology with their engineering background to analyze potential construction sites and provide advice for the build.
- **Geochemists** study the chemical processes that formed Earth and continue to shape it today. Their understanding of Earth can be used to help industries make important decisions and steer companies toward environmentally friendly practices.
- **Petroleum Geologists** spend time out in the field examining potential sources of petroleum in the earth or sea. They also analyze data and create models to ensure new petroleum resources can be found and the oil and gas can safely be extracted.

How does this career affect the world?
The field of geology helps the world maintain life as we know it. For instance, Geologists contribute to our world's food supply by identifying optimal growing areas and monitoring soil quality.

In addition, Geologists help establish where to best build infrastructure in order to build foundationally-sound developments and have the least environmental impact.

An understanding of geology can also help us prepare for and understand catastrophic events like earthquakes and tsunamis. The study of tectonic plates and shifts is a major component of geology. Being aware of areas that are more susceptible to extreme weather events can influence decisions on where to develop communities, the best way to build infrastructure in these areas, and how citizens can prepare... which can in turn save lives!

TAKE ACTION

- Research your local landscape in order to understand why people initially settled in your community. Do (or did) people make a living off the land or was income found in other ways?

- Evaluate your community’s risk for earthquakes. Are there faults or folds in your area? Then create an action plan that educates the public on why earthquakes can occur in your area and what they can do to prepare.

- Investigate your local water source(s). Then, consider how your community can protect your groundwater and water sources, and share this information with your community.