



## What is a geoscientist?

Geoscientists examine the physical features of Earth such as rocks, soil, oceans, rivers and streams, and the atmosphere in order to understand how the Earth works. They study evidence of past life and processes and work to understand what could happen in the future. Geoscientists also answer questions and solve problems about how society can utilize Earth's resources and minimize hazards associated with its natural processes.

Geoscientists—like detectives—use clues preserved in the Earth to understand past ecosystems and events. For example, geoscientists study fossils and rocks to learn about life, landscapes, and climates

thousands, millions, or billions of years ago. Geoscientists piece together these clues to tell Earth's story and understand causes of changes, like extinctions or climate change, in order to predict what might happen in the future.



Geoscientists drilling at Petersburg National Battlefield, Virginia

Geoscientists explore the planet in search of valuable resources—Earth's treasures—such as water, minerals, and energy sources upon which human society depends. As our population grows and our resource needs expand, geoscientists develop new strategies to find, extract, and utilize these resources responsibly to ensure availability for future generations.

Geoscientists—Earth's "doctors"—maintain the Earth's natural processes and reduce dangers that come with living on a dynamic planet. They use tools in the field and laboratory to detect pollutants in water, soil and rock and develop clean-up and prevention plans. Geoscientists also develop methods to restore natural landscapes and processes affected by resource extraction. They use their knowledge of geologic processes to help communities understand potential geologic hazards.



An NPS intern collects a water sample at Great Sand Dunes National Park and Preserve, Colorado

## Learn More and Get involved!

Are you interested in learning about the Earth and its resources? Do you want to protect the environment? Do you like to be outside hiking, camping and exploring new places? If so, a career as a geoscientist might be for you! No matter how old you are or where you live, you can start preparing yourself today for a future in the geosciences.

### In the Classroom

- Ask your teacher to invite a local geoscientist to visit the classroom
- Bring in rocks or fossils you have collected to share with the class for show and tell
- Investigate a geosciences topic for your school's science fair
- Take a geoscience class like geology, environmental science, oceanography, meteorology, or astronomy
- Join or start a geoscience club

### Outside the Classroom

- Start a rock, mineral, or fossil collection, being mindful of local collecting rules
- Find an expert to identify items from your collection
- Visit and/or volunteer at a nearby park or museum
- Subscribe to a science or outdoor magazine
- Join a local geoscience organization
- Apply for a summer internship



### On-line

No parks or science museums nearby? No worries! The internet is also a great place to learn about the geosciences. The National Park Service has a variety of educational resources available for your use.

#### Geologic Resources Inventory (High school and college)

<http://go.nps.gov/gri>

This program provides digital geologic map data and reports to national parks. The information is an excellent resource for school projects.

#### National Fossil Day (All ages)

<http://go.nps.gov/nfd>

National Fossil Day is a celebration promoting public awareness and stewardship of fossils, as well as to foster a greater appreciation of their scientific and educational value.

#### Junior Paleontologist (Age 5-12)

<http://go.nps.gov/jrpaleo>

EXPLORE the ways that paleontologists work; LEARN about Earth's history; and PROTECT fossils in our national parks. Download the Junior Paleontologist Activity Booklet at the link provided above.



#### Views of the National Parks (All ages)

<http://go.nps.gov/views>

Views is a multimedia educational program presenting the natural, cultural, and historical resources of our national parks. You can learn about volcanoes, glaciers, caves, geologic time, and more!

#### Web Ranger (Age 5-12)

[www.nps.gov/webrangers/](http://www.nps.gov/webrangers/)

This is the National Park Service's on-line Junior Ranger program. If you love your National Parks, Monuments and Historic Sites, this site is for you.



Inspection of a rock using a hand lens

## Career Resources

Internships are a great way to get started in the geosciences. Internships allow you to gain experience and test out a career without the commitment of a full-time job.

#### Geoscientists-in-the-Parks

[www.nature.nps.gov/geology/gip/index.cfm](http://www.nature.nps.gov/geology/gip/index.cfm)

#### NPS Student Educational Employment Program

<http://go.nps.gov/student>

#### Youth Conservation Corps

[www.nps.gov/gettinginvolved/youthprograms/ycc.htm](http://www.nps.gov/gettinginvolved/youthprograms/ycc.htm)

#### Student Conservation Association

<http://thesca.org/>

#### The Corps Network

[www.corpsnetwork.org/](http://www.corpsnetwork.org/)

#### Volunteer.gov

[www.volunteer.gov](http://www.volunteer.gov)

#### Jobs with the National Park Service

[www.nps.gov/aboutus/workwithus.htm](http://www.nps.gov/aboutus/workwithus.htm)