

Geochemistry

WebQuest: Careers in Earth Science: Geochemist

Introduction

What do these headlines have in common?

- Engineered Bacteria Mop Up Mercury Spills
- New Model Predicts Environmental Effect of Pharmaceutical Products
- Fool's Gold Gives Scientists Priceless Insight into Earth's Evolution
- Deep Recycling in Earth Faster Than Thought
- Carbon Sink: Up-and-Coming Forests Replacing Aging Forests of Upper Great Lakes

Answer: Geochemistry.

Task

Your design firm has been hired by the local college to help with their career fair to get students excited about different careers. Your task in this WebQuest is to explore the role of a geochemist. You will find out what a geochemist does, where they work, and the different aspects of the job.

Resources

The United States Geological Survey and the National Science Foundation both have extensive Web sites, which contain useful information about geochemistry. Other educational and government sites will also be a valuable source of information. Company Web sites may list job qualifications.

Process (30 points)

As you begin your research, use the following questions to guide your progress.

1. What does a geochemist do?
2. Which of Earth's spheres (atmosphere, biosphere, hydrosphere, lithosphere) do geochemists study?
3. How is a sedimentary geochemist's job different from an oil-prospecting geochemist's job?
4. Where might a geochemist's work take them?
5. What are some other aspects of a geochemist's job?

Poster (20 points)

Here's your chance to be creative! Make an interesting, informational poster about a geochemist. Explain what a geochemist's job is and include some different activities that they perform in their daily routine. Include photos, art, and illustrations to demonstrate interesting features of a geochemist's job and where they do them. Don't forget to include the requirements for becoming a geochemist.

1. What does a geochemist do? At least **3** full sentences.

2. Which of Earth's spheres (atmosphere, biosphere, hydrosphere, lithosphere) do geochemists study? Explain. At least **2** full sentences.

3. How is a sedimentary geochemist's job different from an oil-prospecting geochemist's job? At least **4** full sentences.

4. Where might a geochemist's work take them? At least **3** full sentences.

5. What are some other aspects of a geochemist's job? At least **3** full sentences.
