



SCIENCE CAREER
ADVENTURES

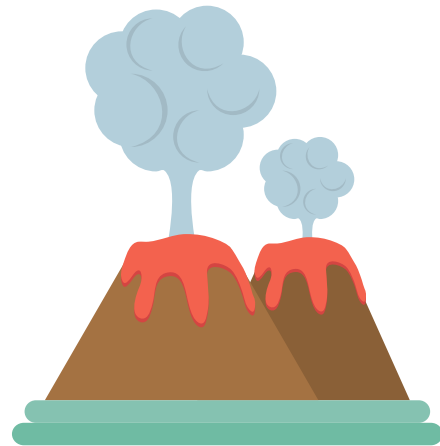
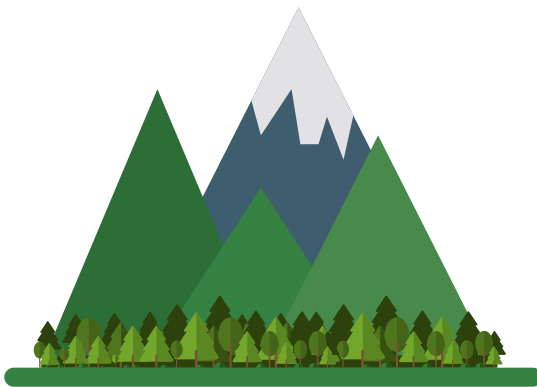
A man with short brown hair, wearing a dark blue polo shirt, is leaning over a desk. He is looking intently at a map or document. He is holding a pencil in his right hand and a ruler in his left hand. The map shows various geographical features in yellow and blue. The background is a plain white wall.

Tyler the Geoscientist: Images of Earth

Meet Tyler!



Hi! My name is Tyler.
I'm a geoscientist,
which means I study
the Earth.



There are so many parts of the Earth to study, like rocks, forests, oceans, and volcanoes! Geoscientists usually choose one part of the Earth to examine. I chose to explore the ocean floor!

Where do Geoscientists Work?

A geoscientist can work for different types of employers. An employer is company or organization who hires you to do a job. Here are a few examples of employers that hire geoscientists!



The government

The government has agencies that protect the Earth. An agency is a fancy way to say an organized group of people. For example, there is an Environmental Protection Agency that works to keep the environment safe.



An environmental remediation company

“Remediation” means fixing something. An environmental remediation company cleans up pollution in water, soil, and air. If a dangerous substance spills into a river, a geoscientist will make a plan to clean it up!

What I am Working On

Right now, I work for a company called Ocean Explorations. Ocean Explorations explores oceans around the world! Today, I am working on two things. First, I am going to create a job posting so I can hire an assistant geoscientist.

A job posting is a description about a job that people can apply for. I will put the job posting online for people to see.



Then, I am going to start working on my next project, looking for a lost ship that is in the ocean somewhere!



Fun Fact!

Scientists know more about the surface of the moon than they know about the ocean floor! 95% of the ocean floor has not been mapped yet!

Making a Job Posting

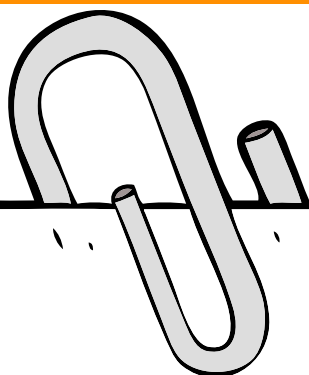
To find an assistant, I am making a job posting. A job posting is like an advertisement. People who are looking for a job can read the posting to get more information about the job. Then, they can decide if they want to apply for the job. A job posting usually includes:

- Description of the company and job.
- Job duties. These are the things that a person will do if they get the job.
- List of education requirements. Most jobs require college degrees.
- Perks of the job. "Perks" are extra things you get when you have this job. They're often unique and fun!



After I make the job posting, I post it online. There are special websites that people use to look for jobs.

Making a Job Posting



New Job Posting

Name of Company: Ocean Explorations

Description of Company: We explore the world's oceans!

Job: Assistant Geoscientist

Description of Job:

The Assistant Geoscientist will help the company explore, map, and study the world's oceans. You must be passionate about science, love to travel, have a sense of adventure, and like solving puzzles.

Job Duties:

- Create maps that show what we discover and where we discover it. For example, you will create a map showing locations of underwater volcanoes.
- Write about our findings. You will help write scientific papers about what we find in the ocean.
- Brainstorm solutions to problems. We brainstorm ideas if people disagree on topics, such as how to study underwater volcanoes.

Education:

College degree in a geoscience-related field (geoscience, oceanography, environmental science) is required.

Perks:

- We will pay for you to get certified in scuba diving.
- You will get to travel all around the world.

Finding a Lost Ship

After I finish creating the job posting, I start on my next project! I am going to look for a battleship that was used during World War II. It's somewhere at the bottom of the ocean!

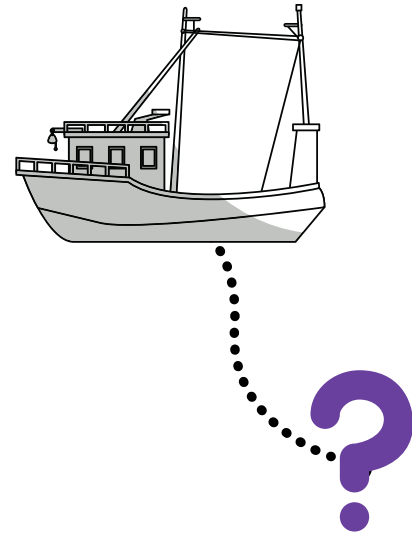


Here are the steps we will take to look for the lost ship!

Finding a Lost Ship

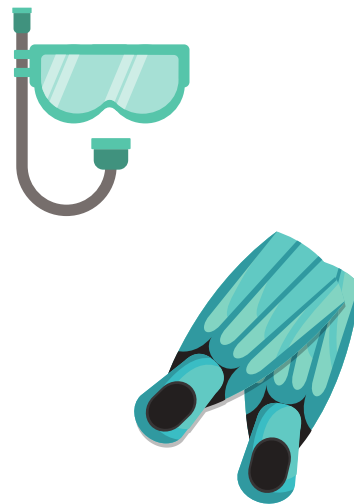
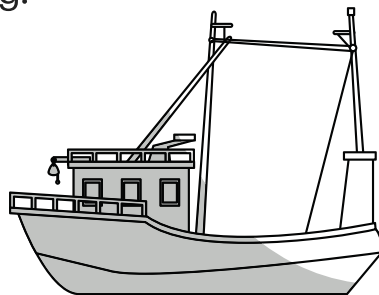
Step 1: Conduct research to figure out the ship's location

We want to learn where the ship's last location was before it sank. To do this, we start by finding out everything we can about the ship! We want to know where it left from and where it was headed to. Next, we will try to figure out where the ship is now located. It's probably not in the same place where it sank! Over the years, the ship will have moved underwater.



Step 2: Prepare to go into the ocean

To prepare to go into the ocean, we have to decide what equipment we need to bring, who is going to be on the dive, and what boat we are taking.

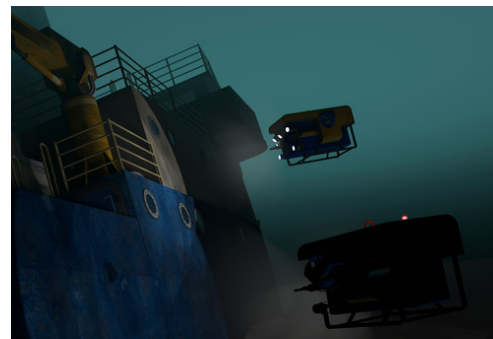
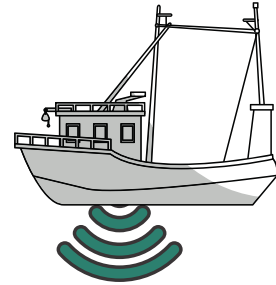


Finding a Lost Ship

Step 3: Look for clues in the ocean

Here is what we will do once we are in the ocean!

- Head to the area of ocean where we think the ship might be.
- Use sonar equipment to map the ocean floor. Sonar equipment sends out signals that hit the ocean floor and bounce back up to the ship. Then, the sonar machines read the signals that bounce off the ocean floor and create a map on our computer screens.
- Look at the maps the sonar equipment created. We will look for anything unusual or things that look like they don't belong.
- If we see something unusual, we will send an underwater camera into the ocean on a submersible. A submersible is like a remote-controlled robot that can travel deep under water. The camera will take pictures and videos in the water!



Finding a Lost Ship

Step 4: Write about our findings

When we return to shore, we will write a report about our findings. Even if we don't find the ship, we will write a report about where we went in the ocean.



Think about it:

Why do you think
scientists write reports
even if they don't find
what they are looking
for?