

Hana the Hydrologist: Testing Water Samples

Meet Hana!



Hi guys, my name is Hana. I am a hydrologist. A hydrologist is a scientist who learns about water. As a hydrologist, I make sure that water is safe to drink. I do science experiments to see if water is contaminated or dirty. If water is contaminated, it is not safe to drink. I have to come up with a plan to clean the water and make it safe to drink.

Being a Detective

Being a hydrologist is like being a detective. I have to figure out if water is contaminated by looking for clues. One clue is a chemical reaction. When water is contaminated, it may bubble, change color, or even smell. It's my job to find these clues to see if water is contaminated or safe to drink.



Tools I Use

Test Tubes



A test tube is a thin, small glass that holds water. Hydrologists use test tubes to hold water they want to test.

Indicator



An indicator is a substance. It is used to see if a chemical reaction occurred. Hydrologists use indicators to see if there is a chemical reaction in water.

Tools I Use

Ipad



iPads are used to record observations about what looks like.

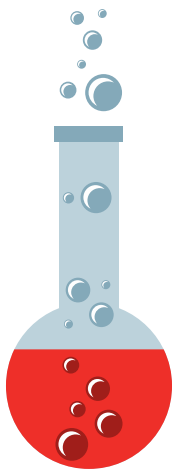
**Goggles
and
gloves**



Goggles and gloves are used to protect your eyes and hands while doing experiments.

Chemical Reactions

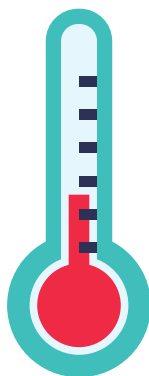
As a hydrologist, I have to know if a chemical reaction occurs.
Here are 3 ways that I know if a chemical reaction occurred.



Bubbling or gas formation



Change in color



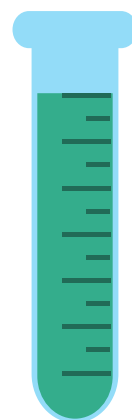
Change in temperature

Testing Water

Today, I am testing water in Bernard Lake. It is my job to see if the water is contaminated. I am going to do a science experiment to test the water.

Step 1

I use my test tube to take a sample of water. I will test this water to see if it contaminated.



Step 2

I add an indicator to the water. I want to see if a chemical reaction occurs.



Step 3

The water bubbles! A chemical reaction occurred. This means the water is contaminated!

