

# Laboratory Report Form

A scientist has five steps he follows in an experiment. This is called the Scientific Method.

1. He decides what **problem** or question he is trying to answer.
2. He decides what his **procedure** or method will be; that is, he decides what he will do to find out the answer to the problem.
3. He selects the **materials** to be used in trying to find the answer to the problem.

4. He carries out the procedure he has planned and lists, or records, the observations he makes. These are his **results**.
5. From his observations, he makes his **conclusion**. The conclusion is the answer to the problem.

In order to explain what he has discovered and how he has discovered it to other scientists, a scientist writes a laboratory report. This allows other scientists to know how to repeat the experiment. We will follow the same form a scientist uses to write up our laboratory reports.

# Example of a Laboratory Report

Submitted by Beverly Berry

## Experiment Title

Experiment 3.1

**AUTHOR:****TITLE:** Elements in Water**PURPOSE:** We are trying to find out how water can be broken down into its two elements and to prove that these elements are oxygen and hydrogen.**ABSTRACT:** (Optional for less detailed and researched reports.)**BACKGROUND:** Hydrogen makes a popping noise when it burns; oxygen causes something to burn faster.**PROCEDURE:**

Materials:	250 ml beaker	2 wooden splints (popsicle sticks)	2 – 4" long wires
	water	2 test tubes	
	salt	6-volt battery	

Fill a 250 ml beaker  $\frac{1}{4}$  full of tap water. Add 1 tsp. of salt and stir. Connect one wire to one post on the battery and put the other end into the water. Do the same with the other wire making sure that the wires do not touch in the water. Hold a test tube filled with water over the end of each wire to collect the gas that will form on the wire. When each tube is full of gas, place a burning splint into the tube and observe.

**RESULTS:** Bubbles formed around the end of each wire, but more bubbles formed from the negative wire than from the positive wire. When we put a burning splint into the test tube from the negative electrode, we heard a popping noise. When this was repeated in the other test tube, the splint burned brighter and faster.**DISCUSSION:** More bubbles formed around the negative wire because that is where hydrogen was forming, and there is twice as much hydrogen in water as there is oxygen ( $H_2O$ ). We knew it was hydrogen because the gas from this test tube popped. We knew the gas in the test tube from the positive wire was oxygen because it burned brighter and faster when the splint was put into the tube.**CONCLUSION:** We were trying to find out how water can be broken down into its two elements and to prove that these elements were hydrogen and oxygen. Water can be broken down by sending an electric current through it. We proved that the gases that were formed were hydrogen and oxygen by placing a burning splint into each tube of gas. The hydrogen made a popping sound and the oxygen caused the stick to burn brighter and faster.**REFERENCES:** (Always include referenced materials.)