

# Hypothesis

*A prediction about what you think will happen in the experiment  
Usually given in "If...Then" format*

"I think..."  
"I believe..."  
"I predict..."  
"I expect..."

# Variable

*Something that is changed in the experiment*

Independent Variable: You change it on purpose

Dependent Variable: It changes as a result of the change you made

# Constants

*Things that you need to keep the same in an experiment*

Try to keep as many things as possible the same in your experiment

Helps to make sure your results happen because of your independent variable

# Control

*The test subject in your experiment that receives no special treatment*

Serves as a basis for comparison

The Independent Variable is eliminated

Used to make sure that the variable is what is causing the change

Sometimes, when you are comparing things, you can't really eliminate the variable, so you must choose an arbitrary control (usually the one you predict will be the "best")

# Observation

*Something that you use your five senses to discover about your experiment*

Sight - "I see..."  
Hearing - "I hear..."  
Touch - "I feel..."  
Taste - "I taste..."  
Smell - "I smell..."

# Inference

*Something that you figure out about your experiment based on your observations*

Use "Common Sense"

An assumption about what is happening

May not be a fact, but can be an opinion

# Results

*The information that you get from your experiment*

Called "data"

Usually recorded in a "data table"

Should be something that can be measured in some way (example: length, time, weight, height, temperature, etc.)

# Graph

*A method of presenting your data to help determine what happened in your experiment*

Usually a bar or a line graph

The independent variable is labeled on the X-axis

The dependent variable is labeled on the Y-axis

# Title

*Tells what you are investigating in your experiment*

The title should be written in the following format:

"The Effect of the (write your Independent Variable here) on the (write your Dependent Variable here)"