

7th grade Science Fair: Hypothesis and Variables



Before proceeding with the actual experiment, plan the following steps. Get approval and feedback from Mrs. Maggioli **before** starting your experiment!

Each of these steps should go on a separate page in your Science Fair binder.

I would strongly recommend typing these, since you will have to type them eventually anyway!

****Hypothesis (5 points)**

After you have reviewed your research, state your hypothesis. It should be written simply and in the correct format. It is an educated guess as to what you think will be the result of your experiment.

If (independent variable) , then (dependent variable) .

(If I do this, then this will happen). *Look in your ISN for a review on writing hypotheses.*

****Reasoning**

Include two (2) reasons why you believe this is true.



****Variables**

Identify the 3 types of variables in your experiment: (*refer to ISN for a review*)

Independent variable: Part of the experiment you are changing on purpose.
What you are “testing”

Dependent variable: Part of the experiment that changed as a result of the changes in the independent variable.
This is what you are measuring.

Controlled variables: items in the experiment that must be kept exactly the same to make sure that they are not having any effect on the dependent variable. This is the “NORMAL”!

Keep in mind that only ONE thing should change at a time in your experiment so that you know that your results are because of the one thing that changed on purpose! If more than one thing changes at a time, it is an invalid experiment!!

<u>Due date: Thursday, January 15th</u>

Name _____

Period _____

Title of Project:

Hypothesis:

Reason #1:

Reason #2:

Independent Variable:

Dependent Variable:

Control:

