

Hypothesis

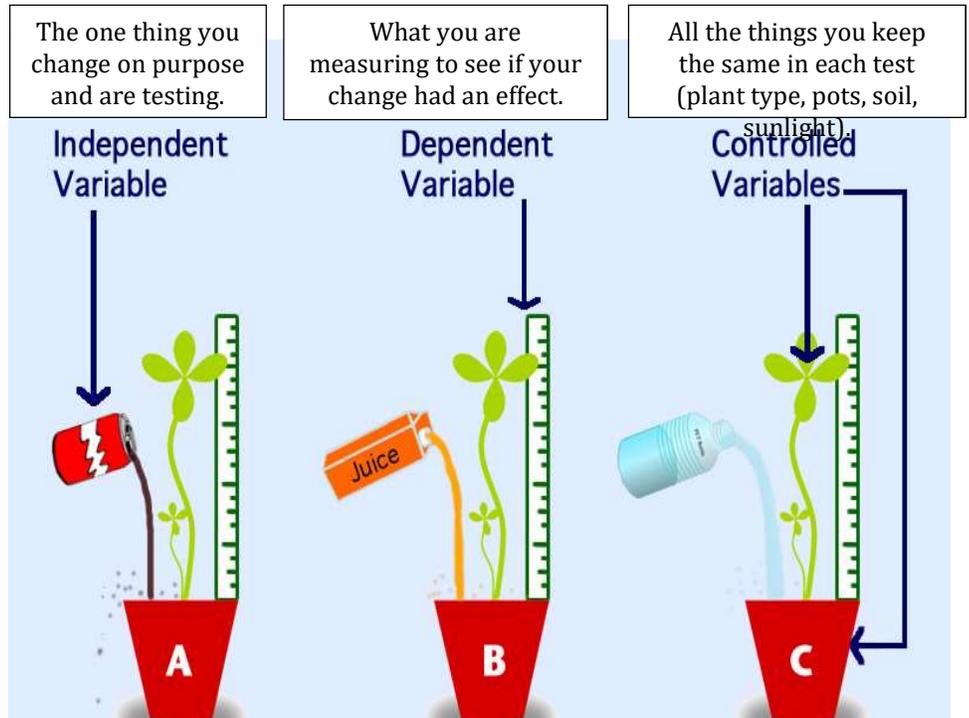
This is what you think will happen in your experiment. Often, this can seem like a cause and effect statement.

I think _____ (say what will happen – include your dependent variable) as measured in/by _____ (the units you are using to measure your data) when _____ (say what you tested - aka your independent variable) because _____ (say what you learned in your research).

Example:

I think plants will grow taller as measured in centimeters when given sugary liquids instead of water because sugar is full of energy.

Experimental Design lists the 3 groups of Variables and Repeats (how many time you repeated the experiment).



Materials list – This is everything that you need for your experiment. If a student has a hard time reading or gets nervous when talking about his/her work, a picture of the collected supplies is very helpful!

The Procedure – This is a very detailed list of every step you took in your experiment. Use a LOT of details so that anyone can figure out exactly how you did your experiment and repeat it. If you are not sure if you have enough details, you can ask someone to follow your procedure and see if they do it correctly.

*** Make sure to record all your observations and measurements (aka data) as you do your experiment ***

The Results- It is great to include photos of your results. You need to have a table of your data and a graph. You can make the graph by hand with graph paper or use a computer program. If you are not sure how graph using the computer, check the Teller Science Fair webpage for instructions.

Discussion – Summarize your results briefly, state any patterns you saw in your results and state any information from your research that that supports your results.

Conclusion – Explain why you think the results of your experiment, your data, support or do not support your hypothesis.

Application- Explain why other people will benefit from the information you learned by doing your project.

If you include items below, special guidelines need to be followed. See end of DPS packet & ask Kara

1. Human subjects research
2. Vertebrate animal research
3. Potentially hazardous biological agents
4. Hazardous chemicals, activities, and devices.

The full text of the International Rules and copies of forms are available at

<http://student.societyforscience.org/forms>