TASK 2: Hypothesizing and Designing a Study

Return to the testable question your group is proposing to study.

***First, you must state your hypothesis and anticipate possible results.***

***State your hypothesis in “If...then...because” format.***

***hypothesis* - a proposed explanation, usually based on prior experience, background knowledge, and logic**

Our hypothesis:

Alternative hypothesis:

***Next, you will design a controlled experiment that will test your hypothesis and help you address your question.***

Your designed experiment will need several key features.

* **Independent Variable** - the manipulated variable
* **Dependent Variable** - the outcome measure; what you think manipulating the independent variable might affect
* **Control Group** - an experimental group that receives no exposure to the independent variable

Describe the following for your proposed experiment:

Independent Variable\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dependent Variable\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Control Group\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***You will also need to describe your method:***

**Method** - the step-by-step process you will follow to collect data

Describe the method by which you will collect data.

***Lastly, consider possible results (data) you might collect during this proposed study.***

What results would support your hypothesis?

What results would contradict your hypothesis?