**Name:**

**Date:**

**School:**

**Facilitator:**

1.01 Experiment Design

**You have learned about the scientific method and different aspects of experiments, such as independent and dependent variables. You are now going to use what you have learned to pose a question and then design an experiment to discover the answer to your question. You do not actually have to conduct the experiment.**

# Part 1: Question, Hypothesis, and Variables

**Think about an experiment you would like to conduct (remember, you won’t actually have to complete this experiment!). Read through all of the questions below to ensure your experiment design includes all of the following components. Then, answer the following questions about the experiment you create.**

1. Pose a question for your experiment. This should be based on a problem you see around you.

1. Write a hypothesis for your experiment based on your question. This should be written in a complete sentence.

1. What is your dependent variable?

1. What is your independent variable?

1. List at least 3 variables that will be held constant during your experiment.
2. What data/measurements will you collect during your experiment?

1. What will be the control group during this experiment?

# Part 2: Experimental Procedure

**In the space below, write a detailed, step-by-step procedure for your experiment. This should be in a list form with the steps numbered; you should NOT write the procedure out in a paragraph form. Make sure to include what measurements to take and when to take them. Your procedure should be detailed enough that someone else could follow it to perform the same experiment.**

**Spaces for steps 1-5 are provided below. You may make adjusts or changes to the outline format as needed.**