![C:\Users\16832\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\2D8I5D52\MC900351957[1].wmf]() **Experimental Design (ED)**

 This outline will help you come up with a valid and measurable experiment. Fill in the information and edit if necessary until you are satisfied with your project.

1. **Identify IV** - (Independent or Manipulated Variable) – unit if applicable
2. **Levels** (depend on the IV) – list specifically what are being used or changed?
3. **Identify DV** - (Dependent or Responding Variable) – unit
4. **Write a scientific question**:

How does (IV) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_affect (DV)?

1. **Controlled (constants) variables** – variables that are kept the same throughout the experiment:
2. **Write a title for your experiment**: (capitalize)

The Effect of (IV) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the (DV) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. **Write a hypothesis for the experiment**:

If (IV or the cause) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then the (DV or the effect with a specific prediction) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ This will happen because (provide scientific reason based on your prior research).

1. How many times will you repeat your experiment? (**Minimum 3**)
2. Why is it important to repeat the experiment?