### Objective:

*(What is the purpose of this experiment? What are you trying to accomplish?)*

### What is the *action* of this experiment?

*(What needs to happen in order to meet the objective?)*

### What will cause the *action* to happen?

*(Are there specific conditions necessary for the action to occur? If so, how will they be met?)*

### How will you determine the result?

*Note that this can be an observation or a calculation.*

### What do you need in order to determine the result?

*For measured quantities, indicate how you are going to measure them.*

* **Constants** (quantities to be looked up)
* **Control Variables** (quantities you are keeping the same)
* **Manipulated (Independent) Variables** (quantities you can determine before the ***action*** occurs)

*Describe how each one will be determined/measured.*

* **Responding (Dependent) Variables** (quantities that cannot be determined until the ***action*** occurs)

*Describe how each one will be determined/measured.*

### Flow Chart

*The timeline is shown in the center. List actions on one side, and observations or measurements on the other, in chronological order. Use arrows to connect each to its place in the timeline. Place a dot on the timeline to indicate when an action and an observation or measurement must take place at the same time.*

|  |  |  |
| --- | --- | --- |
| **Actions** | **Timeline** | **Observations/Measurements** |
|  | *start* |  |
|  | *finish* |  |

### Labeled Sketch or Photograph of Experimental Set-Up:

*Include a sketch or photograph of your experimental set-up with* ***each*** *piece of equipment* ***labeled****. (Include dimensions if relevant.)*