**Investigation Design Diagram (ID)**

**Title:** The effect of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(the independent variable) (the dependent variable)

**Question:** What is the effect of changing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

(the independent variable) (the dependent variable)

**Hypothesis:** If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(describe how you will change the I.V.) (describe the way that you think the D.V. will change as a result of the change in the I.V.)

because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(explain why you expect this result referring to related scientific concepts that you know from your background research).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | I.V. (Independent variable) | | | | |
| L  E  V  E  L | (Control Group  if you have one) |  |  |  |  |
| T  R  I  A L  S |  |  |  |  |  |

D.V. (Dependent variable)

**Constants:** All of the other things that you will try to keep the same for each of your trials.

\* Levels of Independent Variable such as time of day, sites being compared or individuals being compared. Use as many boxes as needed.

\*\* Number of repeated trials at each level of the I.V. or at each site.

Adapted from Students and Research: Practical Strategies for Science Classrooms and Competitions, 3rd Edition, by Cothron, Giese, & Rezba. (2000). Kendal/Hunt Publishing. Gottesman Center for Science Teaching and Learning. 5/24/13