Lab Notebook Format

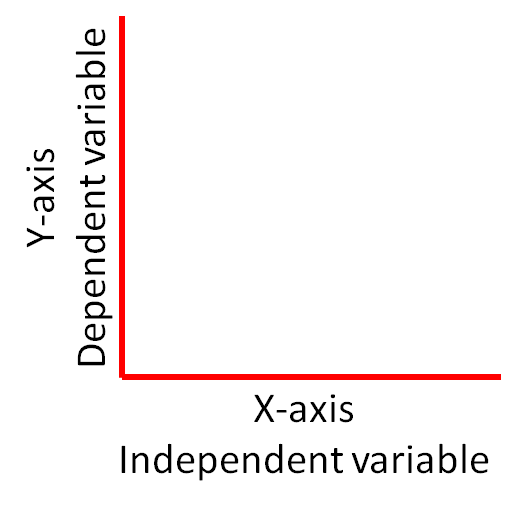
I. PRE-LAB

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| --- | --- |
| LAB QUESTION *What testable question are you trying to answer in the investigation?* | |
| INDEPENDENT VARIABLE  *What are you changing in each trial?* | DEPENDENT VARIABLE  *What is being measured?* |
| HYPOTHESIS  *Format: IF (IV: this is changed), THEN (DV: this result will change in this way), BECAUSE (of this reason)* | |
| EXPERIMENTAL DESIGN *Diagram and describe (annotate) each group in the experiment* | |
| CONSTANTS *Factors held the same in all trials*  *Evident in your design diagrams* | CONTROL(s) *Lacks any change to the IV*  *Trial for comparison to the experimental group/s* |

II. DATA

* Draft your tables/graphs on the whiteboard or in pencil before committing to your notebook
* Include examples of calculations

|  |  |  |  |
| --- | --- | --- | --- |
| **IV**  What you modify in the lab design | **DV**  What you measure as your data | | **RESULTS**  Differences,  Averages… |
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* Columns/rows/axes titled with variable and *unit “The effect of..”*
* Choose graph type based on data type: “*The relationship between..”*

*Discreet Comparison: columns, bars*

*Continuous Change: point, line, histogram*

* Use color, patterns, labeled lines when needed

III. ANALYSIS – 2 paragraphs

**Claim & Evidence**

* Make factual claims from the patterns evident in the data, stating the relationship between the variables.
* Cite specific data as evidence to support your claim.
* Does the data support the hypothesis?

## **Commentary**

## Use reasoning to make inferential claims from the results, including in particular the underlying cause of the effect.

* Make links to unit concepts/vocabulary. How does the lab demonstrate them?

## Discuss any errors resulting from lab design, or any human error that went uncorrected.

## Are your results conclusive? Base this claim on the number of trials, class results, effect of errors, etc.