**“Title” by “Name”**

Date: Partners:

Aim

State the purpose of the experiment in terms of dependent and independent variables.

Hypothesis

What do you expect will occur? Make it relevant to the aim.

Variables

List the following:

* Dependant variable – is the variable being tested in a scientific experiment.
* Independent variable - is the variable that is changed/controlled in a scientific experiment.
* Controlled variable – are the variables that will be held constant during the investigation.

Theory

Provide an outline of any relevant Physics theory. Include:

* definitions
* laws
* formulas
* diagrams

Apparatus

Provide a list of apparatus/equipment

Risk Analysis

Identify the risk and related management strategies

Example.

|  |  |
| --- | --- |
| ***Risk*** | ***Risk Management*** |
| Boiling water | Wear heat proof gloves  Wear protective goggles  Keep workspace clear of any obstructions |

Method

If necessary provided a detailed description of how the experiment was carried out and how variables were controlled throughout the investigation.

Be sure to include any annotated diagram(s), correctly labelled (eg. Diagram #1 or Figure #1) and reference these within your report (eg. refer to Figure #1). It is recommended to use a digital picture of the apparatus set up and insert into your report.

Results

Simply display your results in the most appropriate format available. Traditionally in Physics a table is the most appropriate means to do so. Be sure to include:

* labelled variables (eg. Height)
* units of measurement (eg. meters)
* associated tolerance (eg. ± 0.01 m)
* a correct number of significant figures

Graphical Analysis

If suitable, include graph(s) to help analyse the data collected. Be sure to include:

* a graph title (eg. Motion Graph #1)
* correctly labelled axes, including SI units of measurement (eg. Velocity ms-1 North)
* a scatter plot of the two variables
* a line of best fit and equation (eg. y = mx + c)

Calculations

Show all calculations made in the investigation. Include all steps taken and set out clearly.

Discussions

Answer any set questions in the discussion.

However, in addition to any set questions always be sure to:

* Evaluate your investigation method (state any difficulties encounters and changes made)
* State any recommended improvements or extensions to your investigation
* Provide an analysis and explanation of your results and/or graphs
* Make a comparison between your findings and that predicted within your hypothesis and explain any noticeable differences.

Conclusion

Make a concluding statement. Traditionally you need to convert the aim into a question and answer it.