**Practical Investigations Checklist**

*Each box represents what must be included for you to achieve full marks in your practical investigation. Check off each point as you include it in your investigation write-up.*

**Planning**

* The investigation has a descriptive title
* An aim of the investigation is given.
* A hypothesis is included
* An explanation is given for the logic behind your hypothesis **and** size of the results you expect
* A list of the independent, dependent and controlled variables is included.
* An explanation of how you will control your variables in included
* A specific list of your materials and apparatus is included
* A numbered point list of your method (like a recipe) is included.
* The method is specific - detail, detail, detail! Can it be repeated based on only reading your method?
* There are enough samples and replications of each treatment to make a reliable conclusion.
* Diagrams have descriptive titles.

**Obtaining Evidence**

* Only the data you have recorded is included in this section
* A table is used to collate your data
* Tables have descriptive titles
* Column and row headings are bolded
* Units are given in table and row headings
* The data collected is precise
* You have repeated each measurement at least twice (so you have three examples of each type of reading)

**Analysing Evidence**

* The raw data is manipulated to summarise the results.
* Means or percentages are calculated
* A summary of the data is given as a data table
* All calculations are shown
* Calculated data is presented to an appropriate number of significant figures
* An **appropriate** graph is included
* The graph has a descriptive title
* The axes are labelled correctly including units
* The graph has a line of best fit
* You have described the trends and patterns in your evidence
* You have explained these trends and patterns using detailed scientific understanding
* A clear conclusion is made
* You have explained the extent to which your conclusion supports your hypothesis

**Evaluation**

* You have made a relevant comment about your data/method
* You have identified and explained any anomalies
* You have stated the extent to which the results agree/disagree with your hypothesis
* You have given a detailed analysis of where errors might have occurred and how they have affected your results
* A **detailed** and realistic alteration to your method based on these errors is explained.

SIGNED: Date: