Stage 1 & 2 Biology

**Deconstruct & Design Guidance**

**Requirements:**

* Minimum = size 11 font
* Maximum = 4x A4 pages
* Referencing – only points from your research on specific information that relates (use footnotes for this)

Marked against the following performance standard:



**Aim**

* Outline the aim of your designed experiment (brief)

**Hypothesis/inquiry question**

* Evidence of you thinking about the question
* Questions about the question or hypothesis, etc.

**Variables**

Independent variable

* Justify your choice of variations for the independent variable

Dependent variable

* How will you measure quantitatively?
* Will you be able to measure qualitative data? Why or why not?
* What measuring equipment will be best? Why?
* How will you best represent your data when collected? Justify.

Controlled variables

* What factors will need to be controlled? Why?
* What factors will not be able to be controlled? Why?
* How might the above impact your data collection? Why?

**Materials required**

* Justify choice of materials and equipment; dot point list

**Ethics and Safety**

* Outline the key safety issues and how they are to be addressed while conducting this experiment
* Outline any ethical issues and how they will be appropriately addressed (if any)

**Method/Procedure** to be followed (steps)

* Numbered set of detailed steps
* Consider time needed as part of this
* Justify key parts of your method – annotate in red, etc.

**Results**

* + What quantitative data will you collect and HOW?
	+ Put in a blank data table that you would use if you were to do it!
	+ How will you record it?
	+ What will you record?
	+ What units will be used?

**Review Checklist - Key things that are being looked for:**

* Clear **annotations** that demonstrate your **reasoning**, your **questions**, your **choices** and **justifications**
* Indication of your research **questions** and your findings
* Good to use a table to considering different aspects of the question when you deconstruct.
* Be clear on your **variables** – and explain what they do in the investigation and how they may impact data
* **Justify** decision you make when coming up with your ‘best’ method – why, etc.
* **Justify** materials and each method step clearly
* How you will **measure** results quantitatively and how you will record them
* Detail in method and materials. I.e. “Sugar” = is not detailed. State the type, brand, all volumes and measurements and units, etc.
* The ‘design’ part of this is really important to do well (so is the ‘deconstruct’) ☺