

# National 5

## ASSIGNMENT

### TITLE

Your title should clearly describe what your report is about. It's linked to your structure mark, so make sure your report follows a logical layout (it doesn't need to match the order of instructions exactly).

Must be different to your aim.

### AIM

State the purpose of your investigation, including both the **independent** and **dependent variables** and what aspect of each is **changed** or **measured**. Must be different to your title.

Tip: Keep your aim slightly vague — being too specific can make later sections harder.

### UNDERLYING BIOLOGY

Explain the biology **relevant** to your **aim**.

Include at least 3 **N5-level** points with expanded explanations.

Simple statements will not gain you marks.

Use your **own** words as much as possible.

Tip: Don't stop at three points — include everything relevant to maximise your chance of achieving all four marks.

## DESCRIPTION OF EXPERIMENT

Give a **brief summary** of your experimental method.

Do not include full instructions or detailed values like range, number, or repeats.

**Include:**

- Chemicals used
- Equipment used to measure the dependent variable

Tip: The marker should be able to picture your experiment, not repeat it.

## EXPERIMENTAL DATA

Include a **results table** with all measurements and column headings with units.

Add **averages** from repeated results.

**Remember:** You'll have a copy of your raw results table (without averages) when you write your report under exam conditions.

## GRAPHICAL PRESENTATION

Draw a line or bar graph of your results.

It must:

- Be large enough for accurate readings
- Have **clear scales, labels, and units**
- Use appropriate lines or bar tops
- Be done on graph paper or software (with major & minor gridlines if completed on software).

Tip: Double-check plotted data — one mistake can lose the mark.

## DATA FROM INTERNET / LITERATURE SOURCE

Include **relevant** secondary data to **compare** with your **results**. If needed, add a **short statement linking** it to your **aim**. (E.g if the internet graph has an axis label 'Rate of reaction' , you can add a statement explaining what the rate of reaction is and make it relevant to your experiment.)

Ways to reference:

Source	Reference
website	full URL for the page or pages, with date accessed
journal	title, author, journal title, volume and page number
book	title, author, page number and either edition or ISBN

## ANALYSIS

You must **compare** your experimental/fieldwork data with the data/information from your internet/literature source. This should include **similarities** and **differences** between them, if there are any.

## CONCLUSION

Write a conclusion that:

- **Relates** directly to your **aim**
- Is **supported** by **all your data**
- Is not just a restatement of results



# EVALUATION

You must identify a factor in your experiment/fieldwork that had a significant effect on the **validity**, **reliability** or **accuracy** of your experiment/fieldwork.

You must then explain:

- what you did to minimise the effect of this factor
- what you could have done to minimise the effect of this factor
- how you know this factor had a significant effect

**Validity: Variables**

**Reliability: Repeats**

**Accuracy: Apparatus**

Tip: Do not use the words “valid,” “accurate,” or “reliable” in this section of your report. Instead of “To make my experiment more accurate I...”, say “To improve my experiment I...”

Section	Description	Marks
Title	The report has an informative title.	1
Aim	A description of the purpose of your investigation.	1
Underlying biology	A description of the biology relevant to your aim, which shows your understanding.	3
Data collection and handling	A brief description of your experimental/fieldwork procedure.	1
Data collection and handling	Sufficient data from your experiment/fieldwork.	1
Data collection and handling	Data from your experiment/fieldwork presented in a table with headings and units.	1
Data collection and handling	Values correctly calculated from your experimental/fieldwork data.	1
Data collection and handling	Comparative data/information from an internet/literature source.	1
Data collection and handling	A reference for the internet/literature source.	1
Graphical presentation	Appropriate type of graph used to present your experimental/fieldwork data.	1
Graphical presentation	Suitable scales.	1
Graphical presentation	Suitable labels and units on axes.	1
Graphical presentation	All data plotted accurately.	1
Analysis	Experimental/fieldwork data compared to data/information from internet/literature source.	1
Conclusion	A conclusion relating to your aim, based on all the data/information in your report.	1
Evaluation	Identification of a factor affecting the validity, reliability or accuracy of your experiment/fieldwork and a related explanation.	2
Structure	A report that can be easily followed.	1
<b>Total</b>		<b>20</b>