

WRITING UP OUTCOME1's

O1s are just as important as UNIT ASSESSMENTS and your final exam. 100% on your final written paper is not enough to pass without these.

You will have been issued with a FRONT COVER which gives information about what to cover.

All items from each section should be covered

Let's work down the sheet

A teacher must tick to confirm that you participated in the experiment. If you were absent in this instance it is not good enough just to copy up. Now you don't have to do ALL the experiment so tidying away apparatus might just be enough.

It is also an EXAM PIECE so joint working and copying tables and graphs is NOT acceptable, although you might well have the same results. Save these in your hand in folder in the members part of the Nat 5 Physics and not in groupwork

They look like this:

National 4/5 Biology/Chemistry/Physics Outcome 1 – Assessment Checklist

Pupil Name - _____

Subject - _____

Title of Experiment - _____

Assessment Standard	Evidence required	Evidence produced		
		1	2	3
1.1 Planning an experiment/ practical investigation <div style="border: 1px solid black; padding: 5px; width: fit-content;"> Permission to start expt Date: Initials: </div>	Aim of experiment			
	Hypothesis			
	Dependent/independent variable			
	Variables to be kept constant			
	Measurements/observations to be made			
	Resources /Equipment			
	Method including safety			
1.2 Following procedures safely	Procedures have been followed safely and correctly			
1.3 Making and recording observations/measurements correctly	Observations/measurements taken are correct			
1.4 Presenting results in an appropriate format	Results have been presented in an appropriate format			
1.5 Drawing valid conclusions	What the experiment shows, with reference to the aim			
1.6 Evaluating experimental procedures	The suggestion given will improve the experiment			
Resubmit	Date:			
Resubmit	Date:			
Resubmit	Date:			
Resubmit	Date:			

Teacher _____

Verifier _____

Date: _____

Date: _____

TITLE: *Make it brief and to the point eg OHMS LAW. Sometimes it can be a repeat of the AIM*

AIM: *What are you trying to find out? For example "Finding the half life of " "Finding the value for latent heat of". "Finding the Relationship between X & Y" "Confirming a resistor or light bulb obeys ohms law*

METHOD: *Clearly state each step of the experiment. This usually works best when you do a bullet list and it is also easier to read and change. Few people pass in one go so be prepared to re-draft. Include WHAT you MEASURED, HOW YOU MEASURED and HOW YOU CHANGED THE VARIABLE, even if this is obvious. Remember Mr Bowles is a verifier so write it as if he has never done the experiment!*

RESULTS: *Must be in a table, must be repeated, must have headers and units. Do NOT put units with the numbers add the units in the headers. Make it neat and don't go to too many sig fig.*

Graphs, add gridlines, don't force through the origin, careful with trendlines (can be hand drawn) Axes labelled and with units.

CONCLUSION: *This must relate to the AIM so "The half life of is This compares with the quoted value of " this doesn't have to be long.*

EVALUATION: *Here is your chance to shine and this is an important practice run for Science further up the school. You are basically saying how you made it fair and if it wasn't fair (sometimes a lot easier to discuss) what should/ could you have done differently*

- *effectiveness of procedures- compare it to the real value, was it close (accuracy v precision (AH!))*
- *control of variables- how did you keep everything constant*
- *limitations of equipment- don't just say old equipment maybe things like not enough scale divisions, wires wiggled and changed the value, meters fluctuating, variance on the balance etc.*
- *possible improvements - what would have given you a better result?*

- *possible sources of error.- where were the big things that altered your value (splashes, condensation!)*