Laboratory Report Feedback– summary of key positive and negative points

Student _____ **Marker** _____

Positives	Negatives
Introduction: □ Covered all/most of the main points very well □ Covered some of the main points, but there were some deficiencies. □ Appropriate length	□ Was not sufficiently focussed Insufficient or absent discussion of: □ what you were trying to do in sufficient detail □ how it was to be done □ why you were trying to do it: i.e. what you were trying to learn □ why the measurement was important or relevant (i.e. the context) □ Too brief or □ too long
Theory/Experimental □ Outline of key equations □ Outline of key analysis methods (numerical/graphical) □ Showed some evidence of research – i.e. discussion (e.g. of underlying physics, assumptions etc) beyond the content of the lab script. □ Description of experimental technique so a non-expert would know what you had done. □ Description in appropriate detail □ Description of sources of random and systematic error □ Description of how errors were minimised and evaluated	□ Insufficient or absent outline of key equations □ Insufficient or absent outline of key analysis methods □ Nothing really beyond what was in the script – not much evidence of own research/thinking □ Description a little unfocussed or potentially unclear to a non specialist □ Too much unnecessary detail provided □ Not enough detail provided □ Insufficient description of sources of random or systematic errors □ Insufficient description of how errors were evaluated or minimised. □ Inappropriate use of "I" or "we" (for example) in description □ Method written in a style of a recipe or set of instructions. It is a report on what was done – use the past tense
Results/Discussion/Conclusion □ Results look correct/consistent with what we expect	□ Some flaws in the analysis/incorrect results

☐ Errors appear to have been calculated properly	☐ Error calculation looks flawed Errors seem ☐ too big or ☐ too small
☐ Results presented appropriately in tables (if applicable)	☐ Not all the necessary/relevant data presented
☐ Good graphical representation of data/results (if applicable)	☐ Graphs or tables incomplete or missing
☐ Errors quoted on all quantities as appropriate	☐ Errors missing on one or more key quantities
☐ Illustration of method of combination of errors	☐ No illustration of how errors were combined.
☐ Comparison of result with expected value/result	☐ No discussion of (or comparison with) expected result
☐ Discussion of merit of the technique/ways of improvement	☐ No discussion of the merit of the technique
☐ Appropriate conclusion drawn – taking into account size of errors	Conclusion drawn inconsistent with data: ☐ Generally, the data does not support the conclusion ☐ The error bars are too large for the conclusion drawn to be valid.
☐ Insight/originality shown in discussion of key results and their relevance	☐ Little insight/originality shown in discussion
☐ Summary of key points/results provided in conclusion	☐ Summary of key points not in conclusion
Presentation	☐ Text not always in "report" style – i.e. needs to be in past tense and no use of "I" or "We". ☐ Style of writing not always appropriate (e.g. too "ornate" with perhaps too much padding:, not sufficiently scientific/formal) ☐ Some key equations not numbered ☐ Not all figures adequately titled, captioned numbered ☐ Not all tables/graphs adequately titled, captioned numbered ☐ Numbered equations, figures, graphs or tables not always referred to in the text. ☐ One or more figures/graphs too small. ☐ Reference style needs attention