## Sample Grading Rubrics

### Formal report evaluation sheet

<table>
<thead>
<tr>
<th>Score</th>
<th>Max</th>
<th>Section</th>
<th>Comments</th>
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</thead>
</table>
| 3     |     | **Abstract**  
Summary of work  
Final results & uncertainty  
Appropriate length and information | |
| 6     |     | **Introduction**  
Motivation for measurement  
Theory behind experiment with appropriate refs  
Introduction to equations that will be used  
Context of previous work, if applicable | |
| 3     |     | **Experimental procedure**  
Summary of technique including reference to published procedure  
Instrumentation and chemicals used  
Description of modifications to standard procedure  
Sketch with sufficient detail and labels, if appropriate | |
| 17    |     | **Results (& data)**  
Use of tables and figures to present data and results  
Description of results in text with refs to tables and figures  
Description of methods used to calculate results.  
Quality of results  
correct calculation of results  
Any rejection of data? If so, with adequate explanation?  
Error analysis – propagation of errors method and/or statistical analysis, including basis for uncertainty estimates in measured values | |
| 7     |     | **Discussion**  
Evaluation of reliability of data & results (use unc. analyses)  
Identification of major sources of error and their effect on results  
Comparison of results with literature values, theory, and/or class results as appropriate  
Discussion of significance of results - any trends observed, etc.?  
Conclusions and future directions (suggestions for improvements, possible further experiments/explorations) | |
| 4     |     | **References**  
Literature references properly cited in the text  
References are primary or well-accepted secondary sources  
ACS style used for list of references at the end of the report  
At least one primary source cited - intro or discussion section | |
| 4     |     | **Written mechanics**: spelling, grammar, and style | |
| 6     |     | **Appendices**  
Lab notebook pages with original data  
Sample calculations for results  
Sample calculations for error analysis  
Detailed spreadsheet for calculations | |
| 50    |     | **Total** | |