Lab Title:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Course:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Criteria** | **INCOMPLETE** | **EMERGING** | **DEVELOPING** | **PROFICIENT** | **EXTENDING** |
| **Overall**Complete with analysis of results and images | Lab report is incomplete  | Lab report reveals limited purposes, observations, results, and/or no attempt at analysis. | Lab report reveals basic purposes and results. Analysis attempted, but does not reveal relevance. | Organized lab report with definite purposes, results, and relevance. | Professional lab report with clear communication of original thinking that demonstrates science as a process. |
| **Presentation**Typed & editedSections underlined (Title, Introduction, Purpose, Materials, Procedure, Results & Observations (with tables, pictures/ drawings, labels), Discussion & Analysis. Conclusion) | Lab report was handed back in with hand written data and observations. | Lab report is messy, hand-written with frequent grammar and spelling errors that confuse the reader.Headings and/ or sections are missing  | Lab report is messy yet typed with some grammar and spelling errors that don’t confuse the reader. Headings/ sections are all included, but may be out of order or not underlined  | Standard lab report format is followed with few grammar/ spelling mistakes | Professional lab report format is followed with no grammar/ spelling mistakes |
| **Introduction** Related theory and concepts | No related theory is included. | Indication of a lack of understanding of the relevant concepts. | Indication of a limited understanding of the relevant concepts. | Indication of a working knowledge of most of the relevant concepts. | Indication of aDeep understanding of all of the relevant concepts. |
| **Purpose** Theory, skills, experience | No valid purpose is included.  | One valid purpose was included. | Two valid purposes were included. | Three valid purposes were included. | Three detailed and valid purposes were included. |
| **Materials** | No materials list is included. | Partial materials list was included for one section of the lab. | Partial materials list was included for both sections of the lab. | Full material list was included for both sections of the lab. | Full and detailed material list was included for both sections of the lab. |
| **Procedure**Safety, lab, clean up | No procedure is included | Procedure is incomplete and unclear. Safety is not addressed. | Procedure is incomplete or unclear. Some safety rules are missing. | Procedure mostly complete and mostly clear. Safety is addressed. | Procedure is complete and clear.  |
| **Results and Observations**Tables, pictures/ drawings with labels, colours, variations, mistakes, etc… | No results or observations are included. | Data is recorded poorly: missing or erroneous data, images and/ or labels | Data is not clearly recorded: missing and/or unclear data/ images and/ or labels | Data is completely recorded in tables with images, labels and few errors | Data is complete, clear and correct including images and labels. |
| **Discussion****/Analysis**Calculations (sig. figs. & units) Discussion about raw data results /outliersQuestions answered and discussedError calculated and discussed | Questions answered incorrectly and briefly and the raw data is not analyzed | Questions answered incorrectly or briefly and the raw data is analyzed with many errors to calculations, units, significant figures, error.  | Questions answered briefly but correctly and the raw data is analyzed with some errors to calculations, units, significant figures, error.  | Questions answered correctly with some detail and the raw data is analyzed with few errors to calculations, units, significant figures, error.  | Questions answered thoroughly with explanations and the raw data is clearly analyzed with no errors. |
| **Conclusion**Conclusion statement addressing each of the purposes of the lab | No conclusions are included. | Conclusion limited to a statement. | Conclusion limited to a statement for each purpose with no clear connections. | Conclusion has a statement for each purpose with clear connections to the relevant concepts and theory. | Conclusion clearly compares and contrasts the actual results with the relevant concepts and theory in the purposes. |

**Grade 10% of final mark:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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