**Senior Chemistry** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
**Lab Report Rubric** Assessed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Block:\_\_\_\_\_  
Lab Title:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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|  | | | **Beginning** | | **Developing** | | **Accomplished** | | **Exemplary** |
| **Overall** | | | *Lab report does not reveal objectives, results, and/or has made no attempt at analysis.* | | *Lab report reveals basic objectives and results. Analysis attempted, but does not reveal relevance.* | | *Organized lab report with definite objectives, results, and relevance.* | | *Organized and professional lab report with clear communication of creative, original thinking that demonstrates science as a process.* |
| **Presentation/Format** | | | * Written in pencil or coloured pens * Liquid paper is used * Frequent, obvious grammatical and spelling errors that confuse the reader * Headings are missing * Sections are missing | | * Written in messy blue/black pen * No liquid paper used, but mistakes are scribbled out * Some distracting grammar and spelling errors which do not create confusion * Title/headings are not underlined * All sections are included, but out of order | | * Written in blue/black pen * No liquid paper used, mistakes striked with one pen line * Minimal Grammar and spelling errors * Title/headings are not underlined * Standard lab report format is followed | | * Neatly written in blue/black pen or word processed * No liquid paper used, mistakes striked with one pen line using ruler * Grammar and spelling correct throughout * Title/headings are neatly underlined with ruler * Crisp, neat, organized and professional lab report format that pleases the eye |
| **Pre-Lab** | **Subject, Unit, Date, Name, Partner’s Name** | | * Missing Name and/or Partner’s Name * Date does not coincide with date in the lab | | * Name, Partner’s Name, and Proper Data included, but missing Subject, Unit, or Block | | * Subject, Unit, Name, Partner’s Name, proper Date, and Block all included but out of order | | * Subject and Unit at top left header * Name, Partner’s Name, proper Date, and Block at top right header |
| **Title** | | * There is no title | | * The word “pre-lab” is in title | | * Title does not reveal purpose of lab | | * Title reveals purpose of lab |
| **Purpose** | | * Point form * Some objectives are missing | | * Poor sentence structure(fragments) * Not all objectives are clear to the reader | | * Full sentences * All objectives clear, but no predictions | | * Clear communication through structured sentences that connect one idea to the next * Clearly identifies objectives and hypotheses/predictions |
| **Materials** | | * Material list missing or incomplete | | * All materials are referenced back to the lab sheet/instructions, but hazardous chemicals are not highlighted | | * All materials are referenced * All hazardous chemicals are highlighted | | * All materials are referenced * All hazardous chemicals are described in detail with safety precautions |
| **Procedure – Flow Chart** | | * No diagrams * Procedure is mostly copied/not in own words * Many steps are missing or unclear | | * Unorganized * Diagrams are unclear * Words commands are unclear * Some minor steps are missing or unclear | | * Organized * Diagrams clear * Clear word commands, but not concise * All steps included | | * Excellent organization, easy to follow. * Diagrams clear and catch the eye * Clear, concise word commands * All steps included |
| **Results** | **Prep** | * Tables are missing headings/units * No ruler used for tables | | * Tables not organized/neat * All table headings include units * No title | | * All tables are neatly prepared * All table headings include proper units * All tables are titled | | * All tables are neatly prepared with ruler * All table headings include proper units * All tables are titled and labeled by number |
| **During Lab** | **Data** | * Improper sigfigs * Data recorded in pencil * Data is not recorded in a table * Uncertainty missing | | * Some errors in sigfigs * Data recorded messily with pen * some errors with uncertainty or missing | | * Proper sigfigs and uncertainty with minimal errors * Data recorded with a pen | | * Proper sigfigs and uncertainty with no errors * Data neatly recorded with a pen |
| **Observations** | * No or limited qualitative description * Personal opinions given ex) “I think it smells yucky” | | * Some qualitative description | | * Qualitative description given for most of the chemicals (reactants and products) * Important events are noted | | * Detailed qualitative description given for all chemicals (reactants and products) * Detailed log of experiment progress |
| **Post Lab** | **Analysis** | **Calculations** | * Major calculation work is missing * Improper sigfigs/units * Difficult to follow/work not shown | * Some minor calculations missing * Some minor errors in sigfigs/units | | * Calculations complete with proper sigfigs and units | | * Ordered and easy to follow calculations, complete with proper sigfigs and units | | |
|  | **Graphs** | * No ruler used for axis/line * No axis labels * Scale increments intervals unequal /incorrect * Many data plots missing/incorrect * No line or curve * No title | * Improper placement of independent (X) and dependent (Y) variables * Axis not drawn with ruler, labeled with measurement and units, missing uncertainty * A few errors in uniformity of scale increments * A few data plots are unclear/ incorrect * Line/curve not best fit * Title does not follow “Y vs X” | | * Axis drawn with ruler and labeled with measurement and units, but missing uncertainty * Uniform scale that does includes origin but does not use space effectively * Data correctly plotted with dot, but no circle * Ruler Line/curve of best fit extends past plots * Title follows “Y vs X”, includes measurements but no units | | * Proper placement of independent (X) and dependent (Y) variables * Axis drawn with ruler and labeled with measurement, uncertainty, and units * Uniform scale that includes origin and uses space effectively * Data correctly plotted with dot and circle, legend if appropriate * Line/curve of best fit represent data plots * Title follows “Y vs X”, includes measurements and units | | |
| **Discussion** | | * Point form * Answers are incorrect or incomplete | * Poor sentence structure(fragments) * Most/all answers demonstrate a minimal understanding of concepts | | * Full sentences * The majority of answers demonstrate an understanding of concepts with minimal errors | | * Clear communication through structured sentences that connect one idea to the next * All answers demonstrate a thorough, in depth understanding of concepts | | |
| **Conclusion** | | * Point form * Purpose and/or results not referred to      * No sources of error * Personal opinions are included such as “I like this lab,” “This lab was FUN!” | * Poor sentence structure (fragments) * Refers to purpose, summarizes results without insight      * Sources of error not relevant * Does not discuss relevance | | * Full sentences * Answers purpose by summarizing results * States 1-2 relevant sources of error * Reveals relevance of results | | * Clear communication through structured sentences that connect one idea to the next * Answers purpose by comparing key results to predictions/hypothesis (supported/not supported/rejected) * States 2 or more insightful sources of error and suggests improvement to this lab * Connects to big picture (relevance) * Asks new questions and suggests new experiments for the future | | |