**Methods & Materials Rubric 2016-17**: In this section of a scientific report, you must explain how you TESTED your hypothesis. It should clearly demonstrate why this is a valid and rigorous procedure to see if you can potentially falsify your hypothesis. This section should also allow other scientists to use your methods in their own research.

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| --- | --- | --- | --- | --- | --- |
|  | 5 points | 4 points | 2 points | 0 points | Score |
| HYPOTHESIS, RESEARCH QUESTION, VARIABLES | Hypothesis present, research question present, independent and dependent variables correctly identified | Missing one of the requirements OR IV and DV incorrect | Missing several | None present |  |
| MATERIALS | All materials and equipment listed OR databases all clearly identified | All materials listed or some missing data sources | Some materials listed, several missing data sources | Incorrect or no materials listed |  |
| DESCRIBE CONTROL GROUP AND CONSTANTS | The constant variable – kept the same in both groups - is identified, & described. Control group is identified or lack of control group is explained. | Constant variable is identified but not fully described. Control group not explained. | A constant variable is identified. Control group not present. | Constant variable is not identified or described |  |
| DESCRIBE YOUR EXPERIMENT | Includes and explains all factors that may affect the experimental results, including independent variables, dependent variables | Includes most factors that may affect the results of the experiment.  | Includes some factors that may affect the results of the experiment. | Lacks explanation of factors that affect results |  |
| PROCEDURES | All special details & steps are listed | All steps are listed | Some steps are listed | No steps are listed |  |
| DESCRIBE EXPERIMENTAL GROUP | IDs the experimental group – the one composed of the independent variable | IDs experimental group, but does not fully explain the independent variable | ID experimental group, but incorrectly explains the independent variable | Lack of info on independent variable. |  |
| DEMONSTRATE REPETITION | Fully describes & justifies either multiple trials or multiple experimental setups. | Does not fully describe & justify repetition. | Incorrectly describes repetition | No account of repetition. |  |
| DESCRIBE RELEVANT DATA TO BE COLLECTED | Fully describes & justifies data to be collected in the context of testing the hypothesis. | Describes data but does not fully justify | Briefly describes data. | Does not explain data. |  |
| VALIDITY OF METHOD FOR TESTING THE HYPOTHESIS | Clearly illustrates how this test will enable you to accept or reject your hypothesis. | Partly illustrates how this test will enable you to accept or reject your hypothesis  | Illogically indicates how this test will enable you to accept or reject your hypothesis | Does not illustrate how test leads you to accept or reject your hypothesis |  |

TOTAL OUT OF 50: