Lab Report Grading Sheet

Names of group members: **Period _____**

_____ _____

_____ _____

Purpose:

_____ a) clearly states the objective(s) of the lab

_____ b) defines the independent and dependent variables

Hypothesis:

_____ c) makes an educated guess as to the result(s) (explains reasoning)

_____ d) clearly addresses the purpose statement

Apparatus:

_____ e) lists *all* laboratory apparatus and measuring devices used

_____ f) includes a detailed, labeled diagram illustrating the lab set-up

Procedure:

_____ g) is organized, sequential, and complete enough so that someone not present could duplicate the experiment

_____ h) identifies and names all experimental variables and constants

_____ i) describes how the independent variables were controlled

_____ j) uses good scientific method

Data:

_____ k) records observations and ALL measurements made (including constants)

_____ l) is organized in a labeled table.

_____ m) all numbers have units and correct significant figures

_____ n) includes a reasonable number of trials (at least 6 data points per graph and 3 trials per data point)

Data Analysis:

_____ o) shows methods/formulas used in calculations and mathematical modeling & NOT just final answers (show one calculation of each type)

_____ p) presents repetitive calculations in an organized, labeled table

_____ q) has accurate and appropriate calculations (including units and sig figs)

_____ r) graphs with proper graphing techniques (title, labeled axes, units, independent variable on x-axis, appropriate scales, best fit curve, etc)

_____ s) includes regression statistics and COR values for graphs, and (when appropriate) several different graphs to determine the best fit curve

_____ t) includes correct mathematical models of the graph w/ the curve best fitting the data (derivation of equation, units on slope and y intercept, variables are more descriptive than x and y)

TOTAL GROUP CHECKS TO THIS POINT: _____ / 20

Name of group member:

_____

Conclusion

(to be done individually by each person in the group – identical or plagiarized conclusions will result in a zero for this section)

_____ u) relates to the purpose and is accurate as possible based upon the data available.

_____ v) states the relationship identified in a clear, concise English sentence.

_____ w) includes the mathematical model (equation) which most accurately represents your data, discussing the physical meaning of the slope and y-intercept (don't forget the 5% rule) (even if there is no mathematical relationship, the conclusion must still be backed up with info from the data and data analysis sections)

_____ x) gives an explanation for results that differ from what is expected (both from your hypothesis and research you have done)

_____ y) discusses specific areas of experimental error and how that affected results

_____ z) discusses how experiment could be improved if performed again

(GROUP CHECKS +INDIVIDUAL CHECKS)/26 x 100 = # GRADE

(_____ + _____) / 26 = _____