Results for Scientific Method Projects

**Data Collection**– (Use of Tables)

**Data Table(s) for Scientific Method**

**Title =**  Dependent Variable (specify units)

**Columns=**

**1st Column =** Levels of Independent Variable (One level = Control)

**Labels for other columns** = # Trials (Appropriate number of Trials)

**Last Column** = Analysis of Data (Appropriate Mathematical Process)

**Rows=**

Each row represents a different level of the independent variable and one row for the control set up

**Type of Data**

**Quantitative Data** = Data recorded using units from a standard scale e.g. time (minutes, seconds, etc) temperature (degrees Celsius), distance (meters, kilometers), sound (decibels)

**Qualitative Data** =Assessments using a nonstandard scale or a scale that may change from one recorder to another (e.g. a measure of color using a color chart for comparison- subjective interpretation of color match) or a scale that does not have uniform intervals (e.g. assessment of pain in an emergency room “0-10” or scale of plant health (0-3) where 0 = dead or near dead, 1= yellow or spotted leaves with some leaves dead, 2 = leaves are green, some brown edges, poor turgor 3= healthy appearance, green leaves, good turgor

**NOTE:** Type of Data will determine what form of Analysis can be used.

**Mathematical Analysis of Data**

**Quantitative Data –** Sum, Difference, Average,

**Qualitative Data-** Cannot add, subtract, multiply, or divide these numeric data. Can use mode, frequency, or range

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| Sample Data Collection Table for Project using the Scientific Method |
| Title: Dependent Variable (units) |  |  |  |  |
|   | Trial #1 | Trial #2 | Trial #3 | Trial #4 | Trial #5 | Trial #6 | Form of Data Analysis (e.g. Average or Mode) |
| Level #1 of Independent Variable |   |   |   |   |   |   |   |
| Level #2 of Independent Variable |   |   |   |   |   |   |   |
| Level #3 of Independent Variable |   |   |   |   |   |   |   |
| Control |   |   |   |   |   |   |   |