Results for Engineering Design Projects

Data Collection – (Use of Tables)

Title = Measured Goal (see Design Criteria for Prototype)

1st Column (Row Headings) = “Prototype” and “Current Standard Tools”

Column Headings = 3 Trials of Prototype effectiveness (“Trial 1” Trial 2”, “Trial 3”)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample Data Collection Table for Project Using Engineering Design | | | | | |  |  |
| Title: Measured Goal (units) | |  |  |  |  |  |  |
|  | Trial #1 | Trial #2 | Trial #3 | Trial #4 | Trial #5 | Trial #6 | Form of Data Analysis (e.g. Average or Mode) |
| Prototype |  |  |  |  |  |  |  |
| Current Standard Tools |  |  |  |  |  |  |  |

*Sample Data Collection Table for a project looking at making a solar powered water heater for a family home*:

Design Criteria: Building a solar powered water heater that can supply hot water needs for a family of 4 with standard hot water needs

DATA TABLE: (Use one table for each prototype made)

Amount of hot water used by a Family of 4 with Prototype #1 (assuming hot water use is maximized for prototype, and hot water supply for gas powered hot water heater is unlimited)

Amount of Hot Water Used by Family of 4 (liters)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Month #1 | Month #2 | Month #3 | Average Monthly  Hot Water Use |
| Solar Powered  Hot water  Heater |  |  |  |  |
| Gas powered  Hot Water  Heater |  |  |  |  |