Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period:\_\_\_\_\_\_\_\_\_\_\_\_

**Initial Data Collection of Parent and F1 Generations**

**Directions:** *You will be collecting the first round of data for the Fast Plan Project. Today, we will be looking at phenotypes and counting the number of leaves on each plant in the F1 generation. In addition to collecting the data on the charts below, you will want to photograph each of the plant types for future reference.****Red – 4th Period***

***Green – 6th Period***

***Blue – 1st Period***

***Purple – 5th Period***

**Table 1. Class Data of Phenotype Numbers** (*Record the number of each plant type)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Purple Stem/Green Leaf Phenotype | Non-purple Stem/Green Leaf Phenotype | Purple Stem/Yellow-Green Leaf Phenotype | Non-purple Stem/Yellow-Green Leaf Phenotype | Total # of plants |
| Parent 1 | 17 7 8 18  4 7 8 |  |  |  | 17 7 8 18  4 7 8  1,2 |
| Parent 2 |  |  |  | 17 7 8 11   |  |  | | --- | --- | | 4 8 9 | 4 8 9 | | 17 7 8 11   |  |  | | --- | --- | | 4 8 9  3,1 | 4 8 9 | |
| F1 | 30 33 36  44 30 36 30 |  |  |  | 44 35 45 31  30 33 36  6.3,6.7 |

**Table 2. Average Number of leaves on each F1 plant** (*Calculate the average number of leaves on the F1 plants. The remaining numbers will be given to you once all class periods have calculated their averages)*

|  |  |
| --- | --- |
| **Class Section** | Average number of leaves on each F1 plant |
| 1 | 4.2 |
| 2 | 4.25 |
| 3 | 3.9 |
| 4 | 4.6 |
| 5 | 4.0 |
| 6 | 4.2 |
| 7 | 4.3 |
| 8 | 5.2 |
| 9 | 5 |
| 10 |  |

*\*\*After completing all portions of the data collection that are applicable, be sure that you have photographed images of each of the plant types. It is suggested that you tag the images with their plant type name (P1, P2, F1) so that you remember later on. One way to do this would be to email yourself the images with labels above the pictures or in the subject lines.*