“100% Caffeine” Solution

## **Week #1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tray with a plant** | **Amount of radish plants in a tray** | **Amount of large leaves** | **Amount of medium leaves** | **Amount of small leaves** |
| #1 | 1  1 | 2  no | no  3 | 2 newborn  1 newborn |
| #2 | 1  1  1 | No  No  No | 2  2  2 | 1; 1 newborn  1  2 |
| #3 | 1  1  1 | No  No  No | 2  2  2 | 2 newborn  2 newborn  2 newborn |
| #4 | 1  1 | No  1 | 2  3 | 2 newborn  no |
| #5 | 1  1 | No  No | 2  2 | no  1 newborn |
| #6 | 1  1 | No  No | No  2 | 2  1 newborn |
| #7 | 1  1 | No  No | 4  4 | No  no |
| #8 | 1  1 | 4  4 | No  No | No  no |
| #9 | 1  1 | No  No | No  No | 2  2 |
| #10 | 1  1  1 | No  No  No | 2  2  2 | 2 newborn  1; 1 newborn  1 newborn |

The table above shows **how** the data is being collected. Further on the tables will be showing only the average results of the collected data, in this way it will be easier to see the difference between the results of the data of every single week.

Totaling all the information above we can see that there is:

|  |  |
| --- | --- |
| **Size of the leaves** | **Amount of the leaves in the 100% caffeine samples** |
| Large | 11 |
| Medium | 40 |
| Small | 11 |
| Newborn | 17 |

The leaves have a green color and the stems have a pale green color. The table below shows the average length and width of the leaves:

|  |  |  |
| --- | --- | --- |
| **Leaves Size** | **Average Length** | **Average Width** |
| Large size | 2.33 cm | 2.15 cm |
| Medium Size | 1.92 cm | 1.48 cm |
| Small Size | 1.26 cm | .94 cm |
| Newborn Leaves | .58 cm | .42 cm |

**The average height of plants is 3.88 cm.**

Everything that we can see in data in the table above tells us that there are leaves that have already reached medium size and therefore 17 newborns were produced.

## **Week #2**

The results are shown below in the table:

|  |  |
| --- | --- |
| **Size of the leaves** | **Amount of the leaves in the 100 % caffeine samples** |
| Large | 33 |
| Medium | 36 |
| Small | 24 |
| Newborn | 9 |

The acquired data shows that medium size leaves grew up to the large size, and increased the amount of large leaves by that, the small ones grew up to the medium size, producing a small amount of newborns, and the newborns grew up to the small size and therefore the amount of small leaves in a sample increased.

Below you will see the table with average length of the leaves:

|  |  |  |
| --- | --- | --- |
| **Sizes of the Leaves** | **Average Length** | **Average Width** |
| Large Leaves | 3.27 cm | 1.62 cm |
| Medium Leaves | 2.26 cm | 1.7 cm |
| Small Leaves | 1.53 cm | 1.23 cm |
| Newborn Leaves | 1.1 cm | .7 cm |

**The average height of plants is 6.43 cm.**

**Week #3**

|  |  |
| --- | --- |
| **Size of the leaves** | **Amount of the leaves in the 100 % caffeine samples** |
| Large | 27 |
| Medium | 45 |
| Small | 57 |
| Newborn | 15 |

|  |  |  |
| --- | --- | --- |
| **Sizes of the Leaves** | **Average Length** | **Average Width** |
| Large Leaves | 4.3 cm | 3.28 cm |
| Medium Leaves | 2.88 cm | 2.6 cm |
| Small Leaves | 2.43 cm | 1.8 cm |
| Newborn Leaves | .9 cm | .5 cm |

**The average height of plants is - 8.1 cm.**

**Week #4**

|  |  |
| --- | --- |
| **Size of the leaves** | **Amount of the leaves in the 100 % caffeine samples** |
| Large | 35 |
| Medium | 33 |
| Small | 25 |
| Newborn | 29 |

|  |  |  |
| --- | --- | --- |
| **Sizes of the Leaves** | **Average Length** | **Average Width** |
| Large Leaves | 5.55 cm | 4.35 cm |
| Medium Leaves | 3.50 cm | 3.08 cm |
| Small Leaves | 2.80 cm | 2.23 cm |
| Newborn Leaves | 1.4 cm | 1.25 cm |

**The average height of plants is 8.78 cm.**

**Week #5**

|  |  |
| --- | --- |
| **Size of the leaves** | **Amount of the leaves in the 100 % caffeine samples** |
| Large | 34 |
| Medium | 57 |
| Small | 29 |
| Newborn | 29 |

|  |  |  |
| --- | --- | --- |
| **Sizes of the Leaves** | **Average Length** | **Average Width** |
| Large Leaves | 5.98 cm | 4.40 cm |
| Medium Leaves | 4.00 cm | 3.13 cm |
| Small Leaves | 3.08 cm | 2.15 cm |
| Newborn Leaves | 1.73 cm | 1.27 cm |

**The average height of plants is 11.78 cm.**

The temperature and humidity are being measured every week:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Weeks of watering with caffeine:** | **Minimum temperature of the Week** | **Maximum temperature of the Week** | **Humidity when the temperature was minimum** | **Humidity when the temperature was maximum** |
| #1 | 1ْC | 51ْC | 53% | 55% |
| #2 | 1ْC | 51ْC | 43% | 43% |
| #3 | 1ْC | 51ْC | 54 % | 56% |
| #4 | 1ْC | 51ْC | 44% | 44% |
| #5 | 1ْC | 51ْC | 73% | 74% |