

Mendel Investigation

Mendel was a monk who wanted to figure out how the different traits of a pea plant showed up. He started out with mating 2 different types of traits together, such as a plant with purple flowers mated with a plant with white flowers. Each time 2 plants are mated, their seeds are planted and a new generation of plants grows.

Part 1: Garden 1

Prediction: What will the new plants look like when they grow from the seeds of the 2 plants that were mated with 2 different traits? (Use the flower color example as your traits)

Results:

- Garden 1A: _____
- Garden 1B: _____
- Garden 1C: _____
- Garden 1D: _____
- Garden 1E: _____
- Garden 1F: _____
- Garden 1G: _____

Conclusion: Was your prediction correct? _____ What do you think happened to the second trait? _____

What is the percentage for each trait in each Garden? _____

Part 2: Garden 2

Prediction: What will the new plants look like when each of Garden 1's plants are mated? (Example: 2 purple flowered plants are mated to get a new generation of plants)

Results:

- Garden 2A: _____
- Garden 2B: _____
- Garden 2C: _____
- Garden 2D: _____
- Garden 2E: _____
- Garden 2F: _____
- Garden 2G: _____

Conclusion: Was your prediction correct? _____ Now, what do you think happened to the second trait? _____

Calculate the percentages for each of the traits that show up in each Garden 2.

- Find the total number of plants counted
- Divide the number counted for a trait by the total
- Multiply by 100 to get the percentage
- Repeat for the second trait (total for each trait should be 100%)

Percentages:

- Garden 2A: _____
- Garden 2B: _____
- Garden 2C: _____
- Garden 2D: _____
- Garden 2E: _____
- Garden 2F: _____
- Garden 2G: _____