

Concept 10.1

Genetics developed from curiosity about inheritance

Trait - a variation of a particular character.

Genetics - the study of heredity.

Cross-fertilization - (cross) sperm from the pollen of one flower fertilizes the eggs in the flower of a different plant.

The Blending Hypothesis of Inheritance:

Mendel's Plant Breeding Experiments:

Particulate hypothesis of inheritance - parents pass on their offspring separate and distinct factors (genes) that are responsible for inherited traits.

- these factors retain their identity generation after generation.

Step 1 : Identify pea plants that were true breeding.

Step 2 : Cross-fertilized true-breeding plants that had two distinct and contrasting traits.