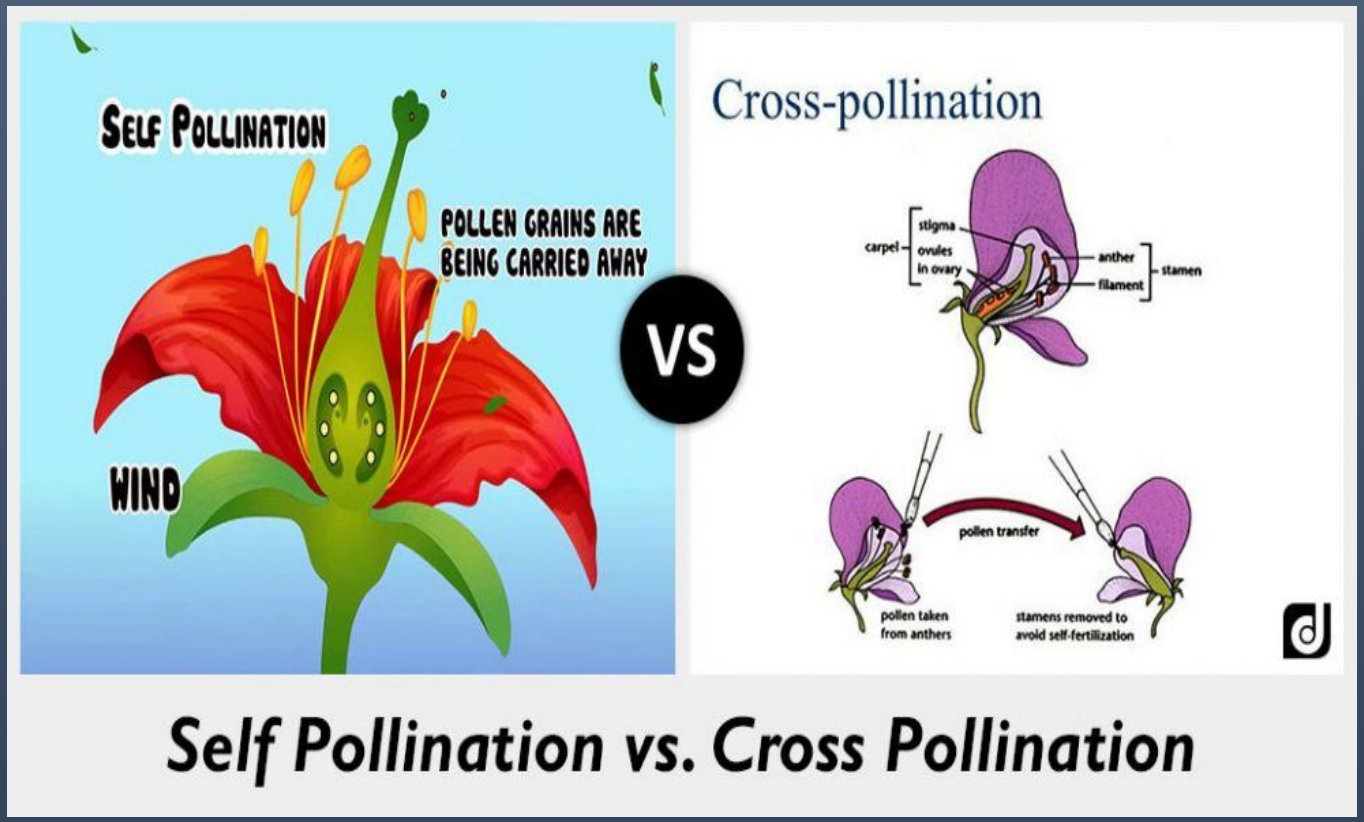
# Ch 12.1: The Work of Gregor Mendel

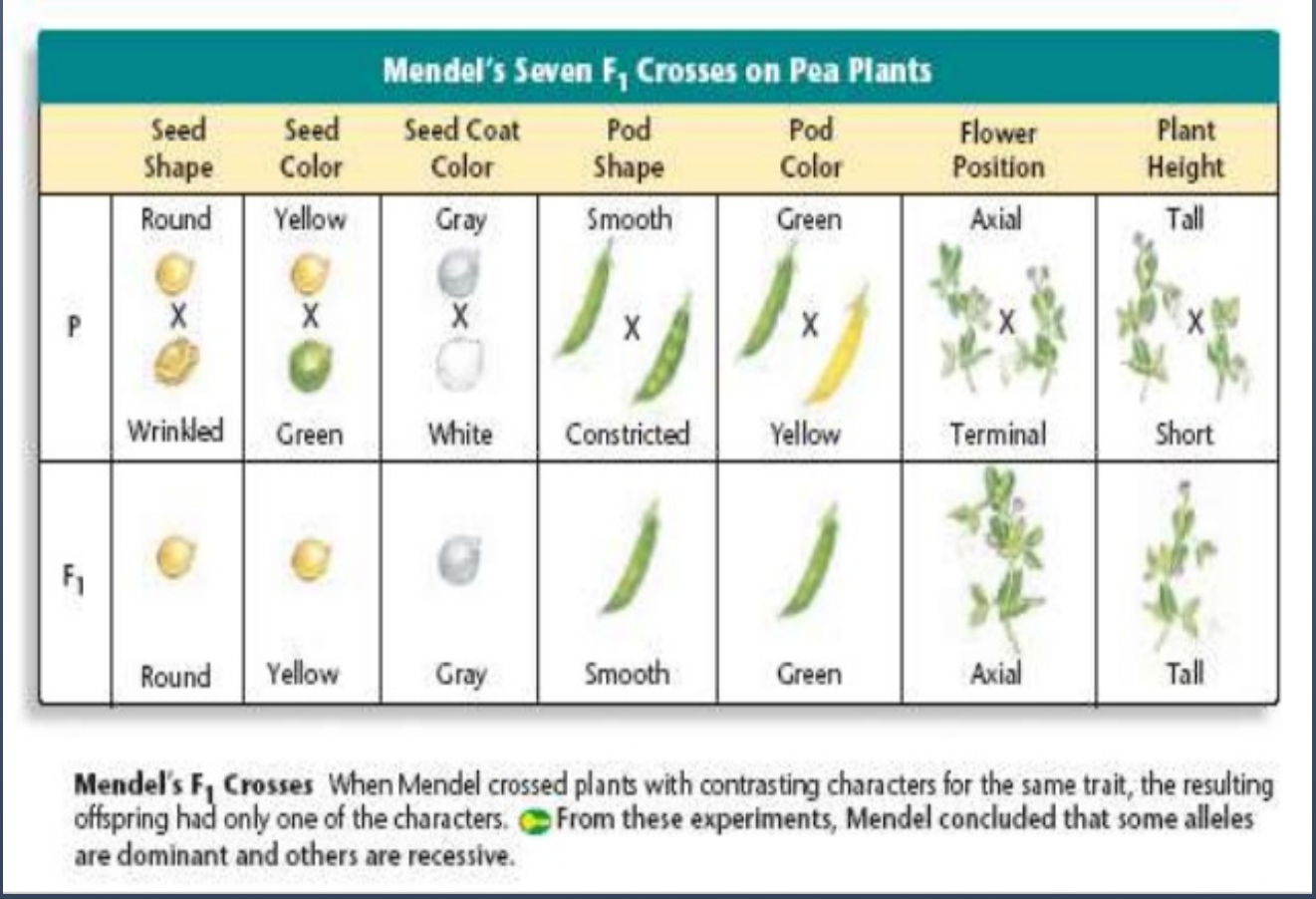
Essential Questions:

- Where does an organism get its unique characteristics?
- How are different forms of a gene distributed to offspring?

- Mendel's experiments
  - Genetics
  - The role of fertilization
    - Fertilization
    - Trait
    - Hybrids



- Genes & alleles
  - Genes
  - Alleles
- Dominant & recessive alleles
  - Principle of dominance




**Mendel's $F_1$ Crosses** When Mendel crossed plants with contrasting characters for the same trait, the resulting offspring had only one of the characters. From these experiments, Mendel concluded that some alleles are dominant and others are recessive.

- Segregation
- The $F_1$ cross
- Explaining the $F_1$ cross
  - Segregation
  - Gametes