

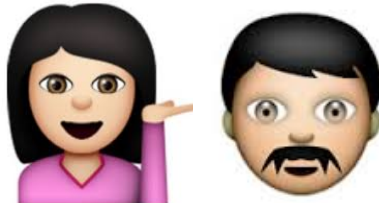
The Monk in the Garden



Gregor Mendel - The "father" of **genetics**



Genetics - study of heredity

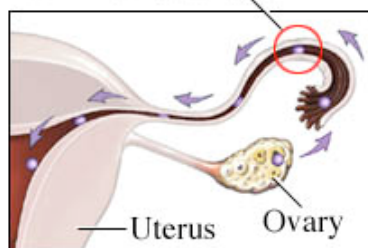


When a mommy and daddy love each other very much...

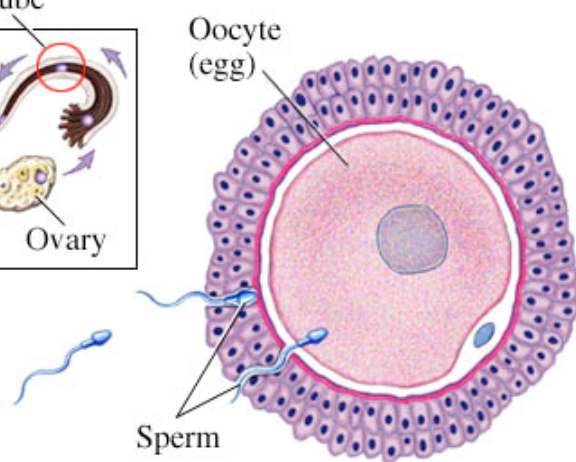


fertilization - during sexual reproduction; male and female gametes (sex cells) join to form a new cell.

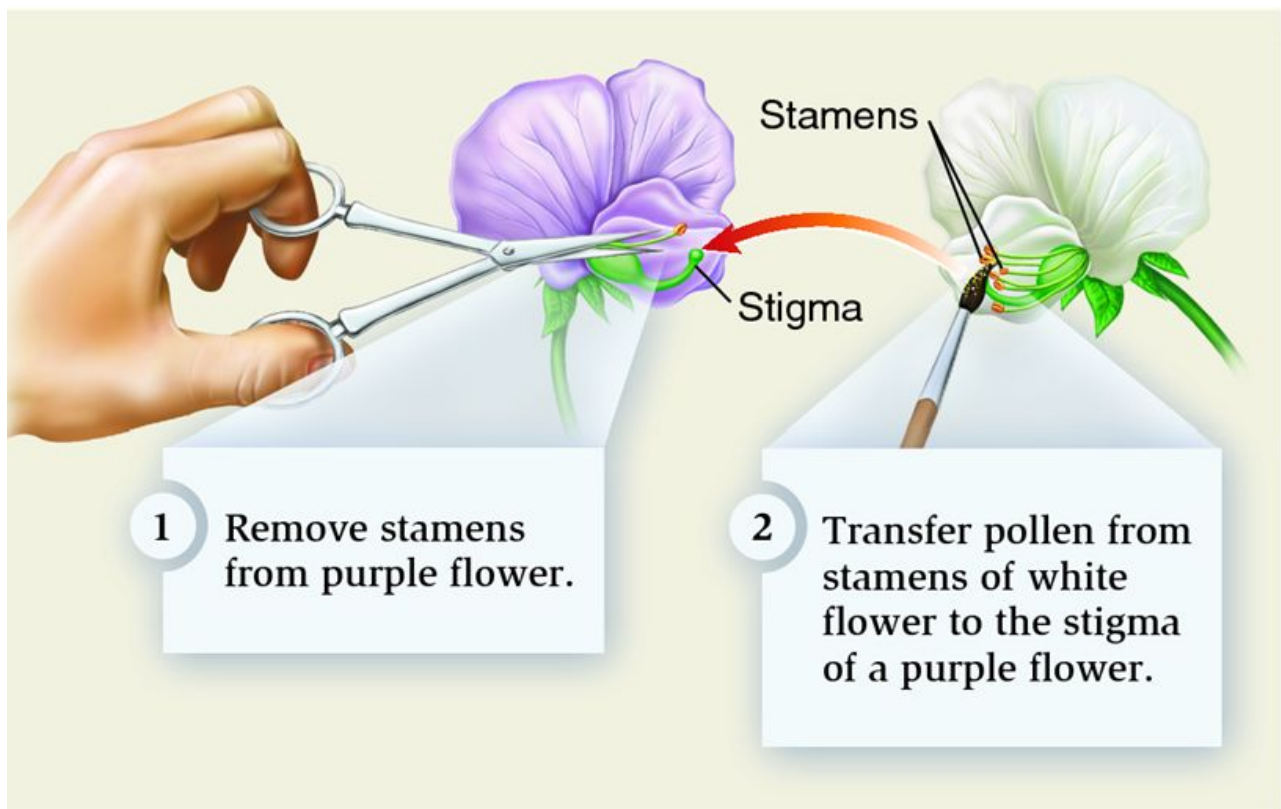
Fertilization occurs within fallopian tube



Enlarged view

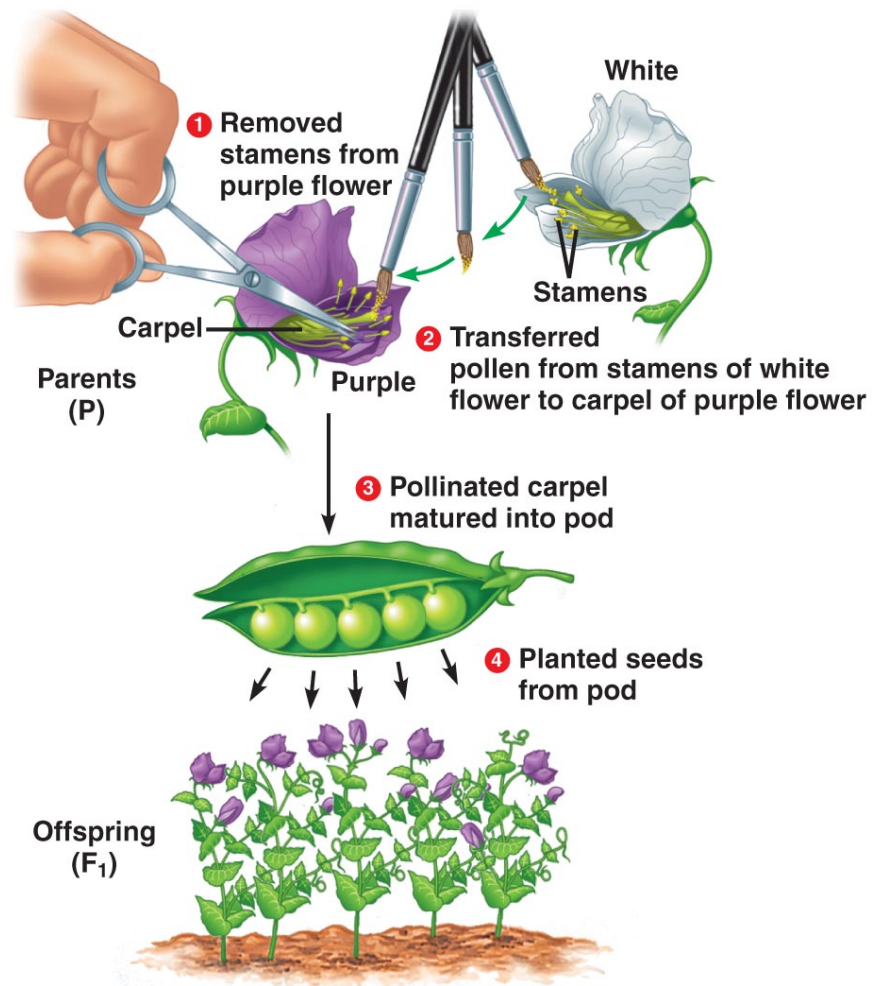


When a mommy pea plant and daddy pea plant love each other very much...



Trait -
characteristic
(color)

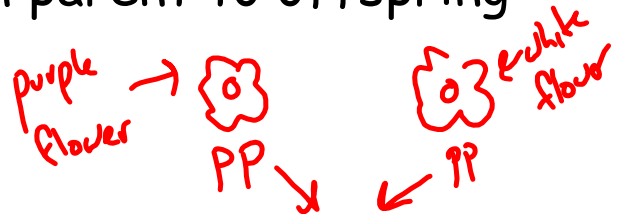
Hybrid - cross
of 2 different
traits



Copyright © 2009 Pearson Education, Inc.

Genes and Alleles






















Gene - Factors passed from parent to offspring
(PP)



Allele - Different forms of a gene (P or p)

purple
white.

BIG IDEA: Some Alleles are dominant and others are recessive!!!!!!!!!!!!!!!!!!!!

	Flower color	Flower position	Seed color	Seed shape	Pod shape	Pod color	Stem length
P	Purple  ×  White	Axial  ×  Terminal	Yellow  ×  Green	Round  ×  Wrinkled	Inflated  ×  Constricted	Green  ×  Yellow	Tall  ×  Dwarf
F₁	 Purple	 Axial	 Yellow	 Round	 Inflated	 Green	 Tall