11-1 Work of Gregor Mendel

Experiments of Gregor Mendel

* The passing of traits from parent to offspring is
* The science of studying this phenomena is
* Gregor Mendel was a in a monastery – he was in charge of the
* He worked with because they fertilized, and had many

Role of Fertilization

* Mendel knew that the (male) from one plant would the (female) of another and created an
* The pea plants were plants with self fertilizing. Meaning the pollen and egg stayed within the plant and the offspring inherited the
* Traits are seed color, pea shape, etc….
* He decided to plants of different by taking the pollen part and dusting it on another egg part of the plant
* These offspring of crosses was called a

Genes and Alleles

* The first cross in a genetic cross is called the (P) and their offspring are called the
  + What does the F mean on page 310?
* The generation to his only showed the characteristic from of the parents
* The that are passed from parent to offspring are called
* Each “gene” produces the and the different forms of these are called

Dominant and Recessive

* According to Mendel there is a in which that some alleles are and other are
* Dominant
* Recessive

Segregation

* After the generation, Mendel still wanted to know where the disappeared were
* He generation and produced the
* His results showed that about of the F2 showed their traits

Explaining the F1 Cross

* Even though the the recessive trait in F1, it still showed up in
* At some point the allele for the recessive trait from the allele of the dominate trait, called

Formation of Gametes

* are the formed
* In the F1 generation, the plant had types of gametes (dominant and recessive)
* Look on page 312, describe what you are seeing in the picture in terms of the combing of gametes and the offspring produced