+ Chapter 11 Notes: Reproduction of Organisms

- Sexual Reproduction

* The cells that combine are called sex cells (egg and sperm).
* Female sex cells are called eggs.
* Male sex cells are called sperm.
* Eggs are in ovaries (2).
* Sperm are in the testis (testicles).
* Fertilization is when the sperm enters the egg. Once the egg is fertilized, it is called a zygote.

- Diploid

* The two main types of cells in the human body are body cells (ie. hair, nerve, skin, etc.) and sex cells.
* A homologous chromosome is a pair of two chromatids. One is inherited from the female and the other from the male. This means that you have half of your genes from your mom and half from your dad.
* Different organisms have a different number of chromosomes. Humans have 46 chromosomes or 23 homologous pairs.
* If during replication, if the chromosome number are unequal, you end up with a mutation.

- Haploid cells

* Haploid cells are cells that have only one chromosome from each pair.
* Diploid cells are cells that have pairs of chromosomes (2).

- The Importance of Meiosis

* Meiosis maintains the correct number of diploid number of chromosomes.
* Meiosis produces four haploid sex cells.