

CORNELL NOTES

Name: _____ Period: _____

Class: _____ Date: **13-14 Nov**

Topic: Chapter 8, Section 2 Sexual Reproduction and Meiosis

Question Column

Notes Column

Sexual Reproduction:	Occurs when two sex cells (egg and sperm) come together. Sex cells are formed in the reproductive organs.
Eggs:	Are formed in the female reproductive organs.
Sperm:	Are formed in the male reproductive organs.
Fertilization:	Occurs when the sperm joins with the egg.
Zygote:	A cell that forms when the sperm and egg join.
Diploid Cells:	Organisms have pairs of chromosomes (Humans have 23 Pairs) – this is called diploid. Have a full set of chromosomes.
Haploid Cells:	Sex cells (sperm and egg) do not have pairs of chromosomes But have a half number of single chromosomes. (in humans 23 single chromosomes) -
Meiosis	The process of cell division that produces haploid sex cells (sperm and egg).
Process of Fertilization	Meiosis - in Figure 10: <ol style="list-style-type: none">1. Haploid number of chromosomes in a sperm combines →2. With a haploid number of chromosomes in an egg -->3. Fertilization occurs and a zygote has a diploid number of chromosomes and then →4. Cells then divide by Mitosis.
Phases of Meiosis:	Meiosis I: Prophase I, Metaphase I, Anaphase I, Telophase I Similar process as Mitosis resulting in two new cells with A haploid number of chromosomes. Meiosis II: Prophase II, Metaphase II, Anaphase II, Telophase II - Similar process as mitosis resulting in four

New cells with a haploid number of chromosomes.

Cornell Notes Continued:

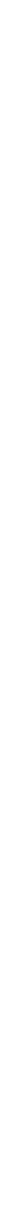
Results of Meiosis:

Four new sex cells (sperm or egg) with a haploid number of chromosomes in each. Important: sperm has a haploid number of chromosomes and it combines with the egg that also has a haploid number of chromosomes → fertilization occurs and from the half set of chromosomes (23 single) you get from your father and the half set (23 single) you get from your mother, gives you a full set of chromosomes (46 single or 23 pairs) to make you. That is why you get genetic traits (genes) from both of your parents.

Mistakes in Meiosis:

Meiosis produces sex cells with too few or more chromosomes. Sometimes zygotes produced die. If the zygote lives, then all the cells of that organism will have too few or too many chromosomes and they will not grow normally.

Cornell Notes Continued:



Cornell Notes Continued:



Cornell Notes Continued:



Cornell Notes Continued:



Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

Cornell Notes Continued:

