

Name: _____ Period: _____ Date: _____

11-4 Meiosis: The making of sex cells!

Making Sex Cells

- What is Meiosis?

- What are gametes?

Homologous Chromosomes – What are they?

Different Types of Cells

- What is the difference between diploid and haploid cells?
 - Give examples of each.
 - What is the shorthand we use for diploid and haploid?

Meiosis – definition?

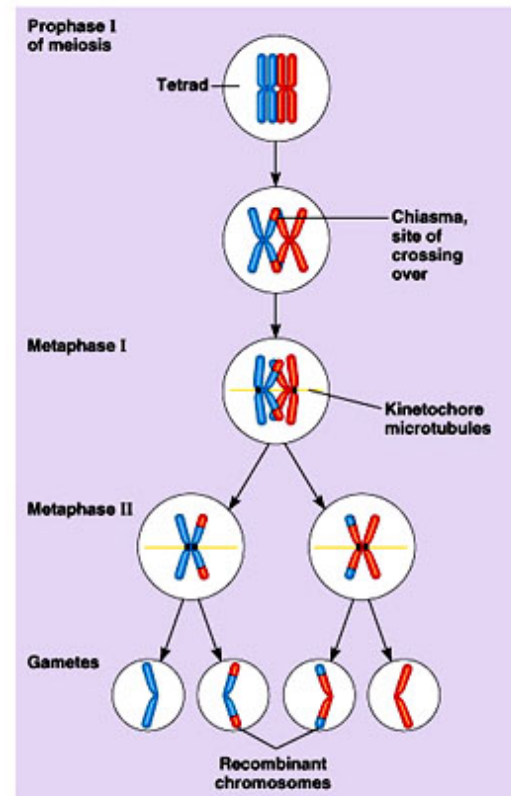
Phases of Meiosis

- two distinct divisions, called _____

- By the end of meiosis II, the diploid cell that entered meiosis has become _____

Meiosis I

- Before meiosis I, each chromosome is _____.
- Division looks similar to _____
- Prophase I, Metaphase I, Anaphase I, Telophase I
- prophase of meiosis I, however, each chromosome pairs



with its corresponding homologous chromosome to form a structure called a

Tetrads – What is it?

Crossing Over

- What is crossing over? When does it happen?
- results in the exchange of alleles between _____ and produces _____
- What is an allele?

After Crossing Over...

- homologous chromosomes _____
- two new cells are formed
- New cells:
 - each pair of homologous chromosomes was separated
 - neither of the daughter cells has the two complete sets of chromosomes (they have been shuffled and sorted)
 - The new cells are _____ from each other

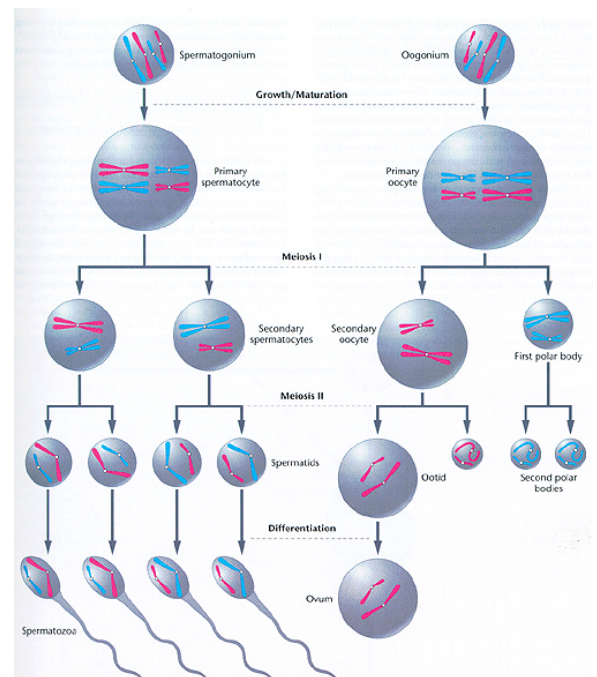
Meiosis II

- two cells produced by meiosis I now enter a second meiotic division
- What happens to the DNA?

- Prophase II, Metaphase II, Anaphase II, Telophase II
- paired _____
- Produces: haploid cells (N)
 - Haploid cells are _____

Gamete Formation

- Males gametes =
- Female gametes =



Comparing Mitosis and Meiosis

- Mitosis and Meiosis **sound alike** but are **VERY different!**
- Mitosis produces:

- Meiosis produces:

Mitosis

Meiosis