

Amoeba Sisters - Meiosis

1. What types of cells are made with meiosis?

Sperm and egg cells known as gametes

2. Why is meiosis called a reduction division?

Because the starting cell has 46 chromosomes while the resulting gametes have 23

3. What happens during interphase?

Growth, DNA replication, cell functions

4. What structure is used to help count the number of chromosomes?

The centromeres

5. What are the four phases of meiosis 1?

Prophase, metaphase, anaphase, and telophase

6. How is metaphase I of meiosis different from metaphase II?

In metaphase two, the chromosomes don't line up in pairs like in metaphase one

7. How many cells are formed at the end of meiosis and cytokinesis?

4

8. What is nondisjunction?

When a cell can receive too many or too few chromosomes during the separation

9. For each set of words, write a single complete sentence that includes both words and contains important relevant information about each.

Meiosis / Gametes

Meiosis is a process that produces gametes which contain half the amount of chromosomes originally so that they have 23 chromosomes.

Gametes / Sperm / Egg

Gametes are the sex cells produced in meiosis and can be either/or a sperm or egg according to the gender.

Chromatid / Centromere

The centromere is used to count how many chromosomes there are, however, when chromosomes are in the x formation each side is called a chromatid.



Homologous Chromosomes / Crossing Over

Homologous chromosomes are pairs in the original cell and when they have already lined up they cross over to create as much variation as possible.