**Meiosis Diagram Notes**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Item # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Use the diagrams on page 121 C to label each phase of Meiosis I and Meiosis II. Briefly describe what happens during each phase.**



4.

3.

1.

2.



8.

7.

6.

5.

**Meiosis Summary Notes**

**Complete the notes from pages 117-122 C summarizing meiosis.**

Meiosis is necessary for **sexual reproduction**. During sexual reproduction two cells combine.

* One cell containing genetic information comes from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The other contains genetic information from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The cells combine into a completely new cell, which becomes the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Most human cells (**body cells**) contain \_\_\_\_\_\_\_\_\_\_\_\_\_ chromosomes (the full number of chromosomes that is normal for a human being).

Any cell that contains the **full number of chromosomes (two sets) for a species is a 2n cell**, also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cell.

Reproductive cells are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and differ from body cells.

* The cells contain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the usual number of chromosomes (one chromosome from each pair).
* Gametes are \_\_\_\_\_\_\_\_\_\_\_cells or **haploid cells**.
* Human gametes contain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unpaired chromosomes.

Gametes are found only in the **reproductive organs of plants and animals**.

* An \_\_\_\_\_\_\_\_\_\_\_ is a gamete that forms in the reproductive organs of a **female**.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the gamete that forms in the reproductive organs of a **male**.

Body cells divide by mitosis.

* Mitosis produces \_\_\_\_\_\_\_\_\_\_\_\_ daughter cells, **each containing exact copies of the chromosomes in the parent cell.**

Cells divide twice during meiosis.

* During meiosis, a single cell goes through \_\_\_\_\_\_\_\_\_\_\_ cell divisions, **meiosis I and meiosis II**.
* Meiosis takes place only in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tissues of an organism.
* Before meiosis begins, the chromosomes of the parent cell are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* A cell that is ready to divide contains \_\_\_\_\_\_\_\_\_\_ copies of each chromosome pair – twice as many chromosomes as usual. The two copies in a pair are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Identify four ways in which meiosis differs from mitosis.

1.

2.

3.

4.