

2. Pairs of homologous chromosomes are called _____.
3. The process when chromosomes exchange parts of their chromatids is called _____.

4. What is the purpose of meiosis?

- D. Meiosis II
1. For each phase of meiosis 1, describe the actions of the chromosomes.

Prophase II:

Metaphase II:

Anaphase II:

Telophase II/
Cytokinesis:

III. Gamete Formation

- A. Male gametes are called _____.
- B. Female gametes are called _____.

5 Explain how mitosis is very different from meiosis.

IV. Comparing Mitosis and Meiosis

- A. Define Mitosis.
 1. If humans have 46 chromosomes, after mitosis, how many chromosomes are in each new daughter cell?

- B. Define Meiosis.
 1. If humans have 46 chromosomes, after meiosis, how many chromosomes are in each gamete?

Summary/Thinking Map

In a well written paragraph, with the following structure, explain how the process of crossing-over can increase genetic variation.

1 Topic sentence: 1

3-5 Concrete details: 1

2

3

4

5

1 Conclusion sentence: 1

Key Vocabulary

Define the Key Vocabulary for this section. Be sure to number and underline your Key Vocabulary word.