

Meiosis Reading Worksheet (3/10)

Integrated Science 2

Name: _____

Per: _____

■ Read pages 767 – 770 in the ISI-2 textbook, and answer the following questions.

1. What is the purpose of *meiosis*? _____

2. Define the following terms:
homologous chromosomes- _____
diploid cell- _____
 _____ symbol: _____
haploid cell- _____
 _____ symbol: _____
tetrad- _____
3. Complete the table on side 2.
4. What is *crossing over*? _____
Reasoning Skills: How might crossing over add to genetic variation in a population? _____

5. In male animals, haploid gametes are called _____.
6. In female animals, haploid gametes are called _____.
7. What is the fundamental difference in meiosis between males and females (sperm vs. egg production)? _____

8. **Process Skills:** In human cells, $2N = 46$. How many chromosomes would you expect to find in a human sperm cell? _____ In a human egg cell? _____ In a human white blood cell? _____
9. Using the table on side 2, along with your cell division notes, compare mitosis and meiosis by completing the following table.

Comparing Mitosis and Meiosis

Characteristic	Mitosis	Meiosis
Purpose		
Number of daughter cells		
Number of cellular divisions		
Genetic composition of daughter cells (haploid or diploid)		
Type of cells undergoing process		