

**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
<b>Purpose</b>		
<b>Number of daughter cells</b>		
<b>Number of cellular divisions</b>		
<b>Genetic composition of daughter cells (haploid or diploid)</b>		
<b>Type of cells undergoing process</b>		