

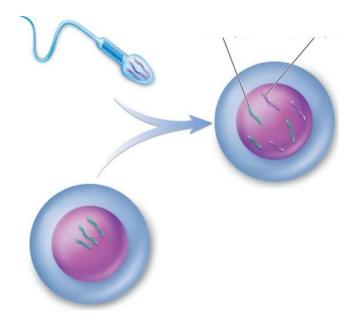
Name: Date: Block:

1. Determine how many chromosomes are in the gametes and body cells of the following organisms:

Organism	Number of chromosomes in the gametes	Number of chromosomes in the body cells
Dog		78
Housefly		12
Cow	30	
Deer	35	

2. What process must cells undergo in order to produce gametes?

3. Label the following diagram with the following terms: sperm cell, egg cell, zygote, haploid, diploid, maternal chromosome, paternal chromosome



- 4. Identify which stage of meiosis each of the following statements describe.
 - a. Nuclear membrane starts to disappear and homologous chromosomes pair
 - b. DNA condenses into chromosomes
 - c. Two nuclei are formed
 - d. Chromosomes separate and move to opposite ends of the cell
 - e. Homologous chromosomes line up in two lines in the middle of the cell
 - f. DNA exists as chromosomes but not as homologous pairs
- 5. In order for chromosomes to move, they need help from structures in the cell.
 - a. Which structure helps these chromosomes move in the cell?
 - b. Where do these structures attach to on the chromosome?
- 6. What is the end result of meiosis?