

Name _____

Human Biology Lab Manual Lab Report
Laboratory Exercise 8: Cell Reproduction

CELL CYCLE

Activity 1: Match the phases of the cell cycle with their descriptions.

1.	5.
2.	6.
3.	7.
4.	8.

MITOSIS

Activity 2: Identify the Phases of Mitosis

(a) Label the phases of mitosis.

(b) Number the images of mitosis in the proper order.

1.	
2.	
3.	
4.	

MEIOSIS

Activity 3: Identify the Phases of Meiosis

(a) Label the phases of meiosis.

(b) Number the images of meiosis in the proper order.

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

Activity 4: Comparison of Mitosis and Meiosis

Fill in the missing information in the Venn Diagram that compares the processes of mitosis and meiosis. Record your answers on the Lab Report.

A.
B.
C.
D.
E.

Activity 5: Lab Review

1. During what phase of the cell cycle does DNA replication occur? _____
2. In which phase of mitosis do the chromosomes align at the equator of the cell? _____
3. What term refers to a cell containing half the number of chromosomes? _____
4. What process during prophase I increases genetic variation? _____
5. Name the type of cell division described by diploid → diploid. _____
6. What type of gametogenesis produces only one viable cell? _____
7. If a parent cell has 24 chromosomes ($2n=24$), how many chromosomes does each daughter cell have at the completion of meiosis II? _____
8. In what phase do homologous pairs separate? Be specific. _____
9. What term refers to the production of sperm? _____