

3.6 CELL CYCLE (MITOSIS) REINFORCEMENT WORKSHEET

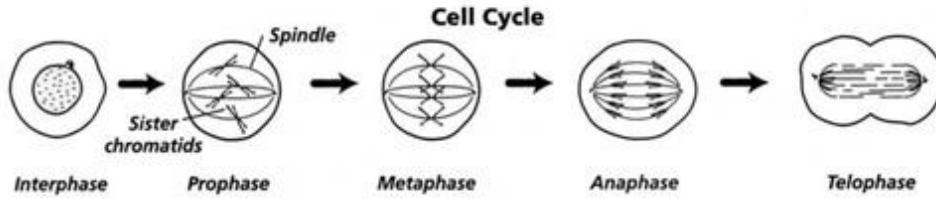
Matching: match the term to the description (drag/drop or write the letter)

A. Prophase **B. Interphase** **C. Telophase** **D. Metaphase** **E. Anaphase**

F. Centromere **G. Chromatid** **H. Spindle fiber**

- ___ 1. The sister chromatids are moving apart.
- ___ 2. A new nuclear membrane is forming around the chromosomes.
- ___ 3. The cytoplasm of the cell is being divided.
- ___ 4. The chromosomes become visible.
- ___ 5. The chromosomes are located at the equator of the cell.
- ___ 6. The nuclear membrane begins to fade from view.
- ___ 7. The chromosomes are moving towards the poles of the cell.
- ___ 8. The spindle fibers are formed.
- ___ 9. DNA is replicated.
- ___ 10. During what phase of mitosis do centromeres divide and the chromosomes move toward their respective poles?
- ___ 11. What is the phase where chromatin condenses to form chromosomes?
- ___ 12. What is the name of the structure that connects the two chromatids?
- ___ 13. In a chromosome pair connected by a centromere, what is each individual chromosome called?
- ___ 14. What structure forms in prophase along which the chromosomes move?
- ___ 15. The period of cell growth and development between mitotic divisions?

Mitosis Worksheet & Diagram Identification



1. Chromosomes move to the middle of the spindle during what phase? _____
2. What are sister chromatids? When do they separate? _____

3. During which phase do chromosomes first become visible? _____
4. In multicellular organisms, the cell cycle produces groups of cells that perform the same function. What are these groups of cells called? _____

Complete the table by checking the correct column for each statement.

Statement	Interphase	Mitosis
5. Cell growth occurs		
6. Nuclear division occurs		
7. Chromosomes are distributed equally to daughter cells.		
8. Protein production is high		
9. Chromosomes are duplicated		
10. DNA synthesis occurs		
11. Cytoplasm divides immediately after this period		
12. Mitochondria and other organelles are made.		

Name _____ Date _____ Period _____

Chromosomes and Meiosis Unit – Reinforcement Worksheet

Examine the table below. Fill in the missing information based on the numbers that are given.

Organism	Body Cell Chromosome Number	Sex Cell Chromosome Number
Cat	38	
Onion		8
Guinea Pig	14	
Cow	60	
Chicken		39

Using the information above, complete the following table.

Organism	Sperm Chromosome #	Egg Chromosome #	Fertilized Egg Chromosome #	Chromosome # in each body cell of the offspring
Cat				
Onion				
Guinea Pig				
Cow				
Chicken				

Main Ideas: Your body has autosomes and sex chromosomes. Body cells are diploid. Gametes are haploid.

1) What is the sex of a person with two X chromosomes? _____

2) Which chromosome carries the fewest number of genes? _____

3) What type of cells are haploid? _____

4) What is the diploid chromosome number in humans? _____ What is the haploid chromosome number? _____

5) How many autosomes are present in each human gamete? _____

How many sex chromosomes? _____

6) How do gametes differ from somatic cells? _____

