

Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_  
Biology

## UNIT 7 EXAM REVIEW: Cell Cycle, Cell Differentiation, & Meiosis

This review is a guide to help you prepare for your exam. You should also review all notes, assignments and any other work completed in this unit. Simply memorizing the answers to the questions on this review will NOT guarantee success on this exam. You must thoroughly understand and be able to APPLY the information covered in this unit. ALL information covered in the unit is fair game for the exam, even if it was not specifically mentioned on this review. **The exam will consist of 30 multiple choice questions.**

### **The Cell Cycle:**

1. In addition to **too much demand placed on DNA**, list 2 problems that occur when cells increase in size.
2. What are the phases of Interphase?
3. What occurs during G1 phase?
4. What occurs during S phase?
5. What occurs during G2 phase?
6. Cell division occurs during the M phase of the cell cycle. What are the two stages cell division that make up the M phase? What specific part of the cell is dividing in each of the two stages?
7. When during the cell cycle are chromosomes visible?

### **Phases of Mitosis & Cell Differentiation:**

8. List the phases in order, Draw the cell, Describe what is happening
9. What is a centromere?
10. What is the role of the spindle/spindle fibers during mitosis?
11. What is apoptosis?
12. What are cyclins?
13. How does cancer affect our cells?
14. What is cell differentiation?

### **Meiosis:**

15. Be able to recognize a representation of crossing over and understand how it allows for greater variety of genetic outcomes in cells.
16. When do chromosomes form tetrads?
17. List how mitosis and meiosis are different.
18. Why are gametes haploid?
19. Be able to explain how the haploid and diploid number of an organism compare.