

Name: \_\_\_\_\_

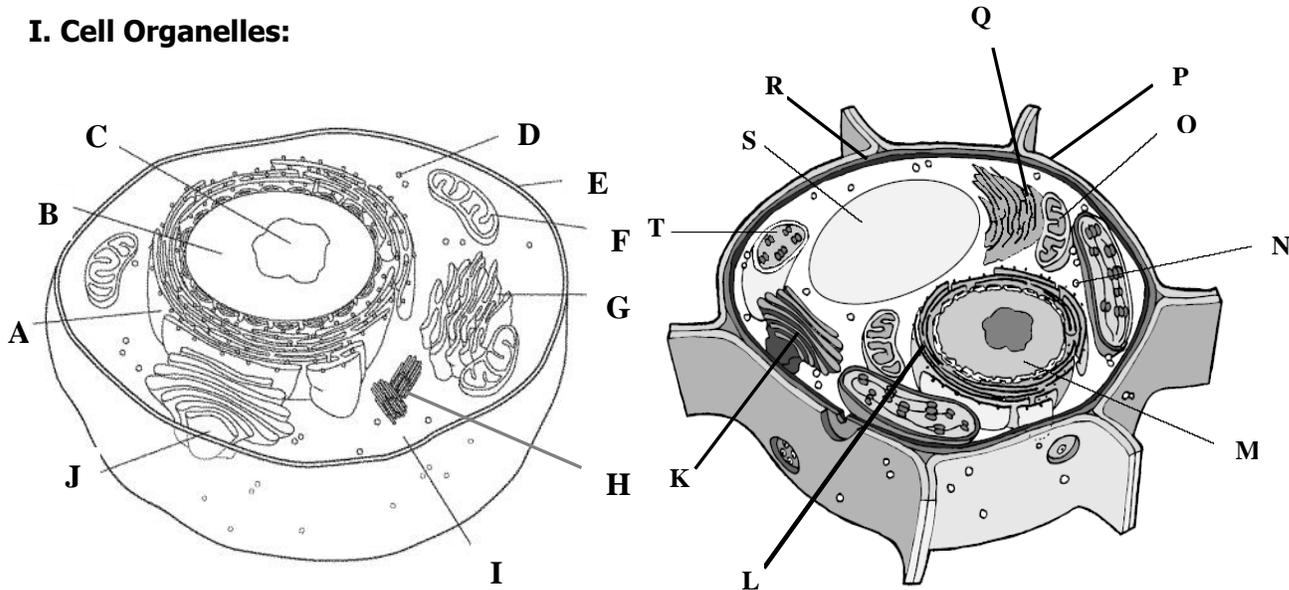
Date: \_\_\_\_\_

Per: \_\_\_\_\_

### Unit 5 EXAM REVIEW: Cells

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.

#### **I. Cell Organelles:**



**\*\*\* Be able to identify each of the structures from the animal and plant cells above and their functions. Use your cell foldables to study the structures AND functions.\*\*\***

#### **II. Photosynthesis and Respiration :**

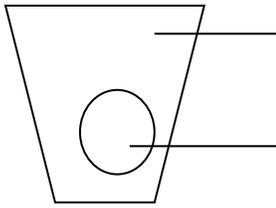
1. What are the reactants of photosynthesis?
2. What are the products of photosynthesis?
3. What are the reactants of cellular respiration?
4. What are the products of cellular respiration?
5. What is the relationship between the net chemical reactions of photosynthesis and respiration?
6. When cells break glucose apart during cellular respiration, the energy is captured in molecules of-

#### **III. Define the following and know how they relate to the unit:**

7. Eukaryotic Cell
8. Prokaryotic Cell
9. Osmosis
10. Diffusion
11. Active Transport
12. Isotonic solution
12. Hypertonic solution
13. Hypotonic solution

**MORE ON THE BACK!** →

#### IV. Tonicity Examples:

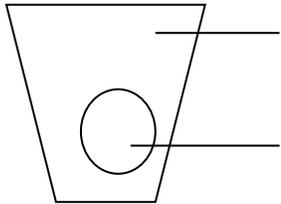


Solution:  
40% H<sub>2</sub>O  
60% salt

Cell:  
70% H<sub>2</sub>O  
30% salt

19. A. If the membrane of the cell is permeable to water, in which direction will water molecules move?

B. Is the solution hypertonic, hypotonic, or isotonic?

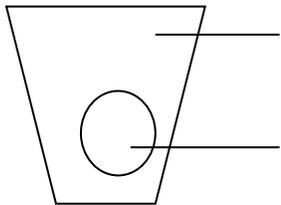


Solution:  
70% H<sub>2</sub>O  
30% salt

Cell:  
70% H<sub>2</sub>O  
30% salt

20. A. If the membrane of the cell is permeable to water, in which direction will water molecules move?

B. Is the solution hypertonic, hypotonic, or isotonic?



Solution:  
95% H<sub>2</sub>O  
5% salt

Cell:  
70% H<sub>2</sub>O  
30% salt

21. A. If the membrane of the cell is permeable to water, in which direction will water molecules move?

B. Is the solution hypertonic, hypotonic, or isotonic?

#### **Also know FROM PREVIOUS UNIT:**

22. Starch and glycogen are examples of which biomolecule?

23. What is a catalyst?