

**SCIENCE DEPARTMENT
WORKSHOP BIOLOGY BIMESTRAL TEST
SEVENTH GRADE
2009-2010**

Name: _____ Date: _____ Grade: _____.

1. Complete the following chart

Organelle	Function	Structure
Nucleus		
Chloroplast		
Mitochondria		
Endoplasmic Reticulum		
Vacuole		
Cell membrane		
Cell wall		

Use the following chart to answer questions 1 and 3. This chart describes the percentage of proteins and lipids found in different tissues.

Tissue \ Substance	Muscular	Gland	Nervous	Bone
Proteins	50%	70%	20%	80%
Lipids	50%	30%	80%	20%

1. We can say that the gland tissue has:
 - A. more ribosomes.
 - B. less endoplasmic reticulum.
 - C. less ribosomes.
 - D. more endoplasmic reticulum.

2. We can say that the bone tissue has:
 - A. less ribosomes.
 - B. more endoplasmic reticulum.
 - C. less endoplasmic reticulum.
 - D. more ribosomes.

3. If we compare the muscular and nervous tissue. The nervous tissue has more:
 A. ribosomes. B. lysosomes. C. endoplasmic reticulum. D. chromosomes.

Use the chart to answer questions 4 to 7

Cell division	1	2	3	4
Cell A	2	4	8	16
Cell B	2	2	2	2

4. Which cell is dividing? Why?
 5. Which cell has centrioles? Why?
 6. You need to produce a chemical that stay the same if the cells divide. Which is the best alternative? Why?
 7. In four cell divisions what is the difference of number of cells between cells A and cells B? Why?

The chart represents the numbers of sodium and potassium of particles inside and outside the cell. The movement of particles is from outside the cell to inside the cell. Use the chart to answer questions 8 to 10.

Ion	Outside the cell	Inside the cell
Magnesium	150	100
Iron	100	50

8. The kind of transport of magnesium is:
 A. Active transport, because particles move from a lower to a higher concentration.
 B. Passive transport, because particles move from a higher to a lower concentration.
 C. Active transport, because particles move from a higher to a lower concentration.
 D. Passive transport, because particles move from a lower to a higher concentration.
9. The kind of transport of iron is:
 A. Passive transport, because particles move from a lower to a higher concentration.
 B. Active transport, because particles move from a higher to a lower concentration.
 C. Passive transport, because particles move from a higher to a lower concentration.
 D. Active transport, because particles move from a lower to a higher concentration.

10. Which ion needs energy to be transported?
A. Iron. B. Magnesium. C. Iron and Magnesium. D. None of above.

11. Complete the following chart using minimum 4 characteristics

Animal cell	Plant cell

12. Find out 2 similitudes and 2 differences between animal and plant cell
