

## Cell Structure and Function Pre and Post Lab Assessment

1. Which cell structure is primarily responsible for homeostasis?  
a. cytoplasm            b. nucleus            c. plasma membrane
2. Which cell structure is primarily responsible for heredity?  
a. cytoplasm            b. nucleus            c. plasma membrane
3. Which model describes membrane structure?  
a. Lock and key            b. Fluid mosaic            c. run and tumble
4. The tree of life is divided into  
a. 3 Domains            b. 3 Kingdoms            c. 5 Kingdoms
5. Bacteria differ from animal cells in that, bacteria  
a. are larger            b. have more chromosomes            c. lack a nucleus

## Post- lab assessment

1. How did potato cells stained with iodine appear? A. boxy cells with large red dots inside  
b. long thin cells with light brown dots inside    c. boxy cells with dark blue/black dots inside  
d. boxy cells with green ovals inside
2. How did onion epithelial cells stained with iodine appear? A. boxy cells with large red dots inside  
b. long thin cells with light brown dots inside    c. boxy cells with dark blue/black dots inside  
d. boxy cells with green ovals inside
3. How would you describe cells of Elodea? A. boxy cells with large red dots inside    b. long thin cells with light brown dots inside    c. boxy cells with dark blue/black dots inside    d. thin or boxy cells with green ovals inside
4. When 10% NaCl was added to the Elodea leaflet, what happened? A. Nothing, 10% is an isotonic solution for Elodea    b. water left the cell, 10% is a hypotonic solution for Elodea    c. water left the cell, 10% is a hypertonic solution for Elodea    d. water entered the cell, 10% is a hypertonic solution for Elodea
5. The potato stick in distilled water was \_\_\_\_\_ than the potato stick in salt water.  
a. crisper    b. more flaccid    c. the same as
6. What happened to the potato stick in salt water? A. water entered the potato cells, and the cells lost turgor    b. water left the potato cells and the cells lost turgor    c. water left the potato cells and cells gained turgor    d. water entered the potato cells and the cells gained turgor
7. What happened to the potato stick in distilled water? A. water entered the potato cells, and the cells lost turgor    b. water left the potato cells and the cells lost turgor    c. water left the potato cells and cells gained turgor    d. water entered the potato cells and the cells gained turgor
8. What happened to red blood cells placed in distilled water? a. the cells lysed    b. the cells crenated    c. there was no change in the cells
9. What happened to red blood cells placed in 0.9% NaCl? a. the cells lysed    b. the cells crenated    c. there was no change in the cells
10. What happened to red blood cells placed in 10% NaCl? a. the cells lysed    b. the cells crenated    c. there was no change in the cells

11. What happened in the dialysis tubing experiment? A. iodine diffused into the tubing, glucose diffused out and starch was retained in the tubing B. glucose diffused into the tubing, iodine diffused out and starch was retained in the tubing C. starch diffused into the tubing, glucose diffused out and iodine was retained in the tubing
12. What factors influenced the diffusion of dyes in agar? a. molecular size b. temperature  
c. both a and b