**VOCABULARY:**

1. Selectively Permeable
2. Diffusion
3. Osmosis
4. Passive transport
5. Active transport
6. Photosynthesis
7. Autotroph
8. Heterotroph
9. Chlorophyll
10. Stomata
11. Respiration
12. fermentation
13. Endocytosis
14. Exocytosis
15. Lactic acid
16. Fermentation
17. Hypertonic
18. Hypotonic
19. Isotonic
20. Concentration Gradient
21. Chloroplast
22. Mitochondria
23. Nucleus
24. Cell Membrane

**QUESTIONS:**

**Osmosis and Diffusion**

1. What is the definition of diffusion?
2. What is the definition of osmosis?
3. What is active transport and what is used?
4. What is passive transport and what is used?
5. Draw a diagram comparing endocytosis and exocytosis.
6. What is difference between a permeable membrane and a selectively permeable membrane?
7. What is the difference between a hypertonic and hypotonic solution? What is isotonic?

**Photosynthesis**

1. What is photosynthesis?
2. What is an example of a heterotroph?
3. What is an example of an autotroph?
4. What is chlorophyll and where is it found?
5. What is glucose?
6. What is a stomata and how is it used in photosynthesis?
7. What organisms use photosynthesis and how do other organisms benefit from it?

**Respiration**

1. What is respiration and who uses it?
2. What does the mitochondrion have to do with respiration?
3. Where does the first stage of respiration occur and what happens?
4. Respiration and photosynthesis are similar because . . .
5. Respiration and photosynthesis are different because . . .
6. How do respiration and photosynthesis control the gases in the atmosphere?

**Fermentation**

1. What is fermentation?
2. What is the difference between fermentation and respiration?
3. Explain alcoholic fermentation.
4. What organisms use alcoholic fermentation?
5. Explain lactic acid fermentation including where and why it occurs.