

Name _____

Study Guide: Life Science

Section _____

Test Date _____

Chapter 4: The Cell in Action

4-1 Cell Transport

What is a selectively permeable membrane?

Explain the difference between passive and active transport?

Describe the two types of passive transport.

What is the main difference between both of these?

Be able to draw a diagram to show diffusion and osmosis.

What is equilibrium? When is it reached?

How do very large molecules get inside the cell?

What does the prefix endo- mean? Exo- mean?

4-2 Cell Energy

Explain what producers are. How do they make energy? What is the process?

Be able to explain how photosynthesis occurs. What happens in the chloroplast? What is given off or produced?

What are consumers? How do they make energy?

Be able to explain the process of respiration.

Explain the difference between aerobic and anaerobic.

What is fermentation? Where does it take place and under what conditions?

What happens to athletes when their muscles run low in oxygen?

4-3 Cell Cycle

1. During what phase do cells spend most of the time? What happens in that phase?

2. Mitosis: be able to explain all the steps of mitosis. Know what happens in each phase.

Remember: **I Passed My Algebra Test**- Interphase, prophase, metaphase, anaphase, telophase

4. Explain what a chromatid, centromere and spindle fibers are.

5. What type of cells undergo mitosis? What is the end result?

6. What is asexual reproduction? Sexual reproduction?

7. What are some types of asexual reproduction?