

To be successful on the exam, you need to define and correctly use all of the vocabulary on the study guide. There is no word bank on the exam. You should review the material in the textbook, your notes, homework, and worksheets. Exam is worth two test grades.

**The Cell and Its Structure (Chapter 2.4 p 60-67)**

cell wall	mitochondria	endoplasmic reticulum
cell membrane	ribosomes	Golgi bodies
cytoplasm	lysosomes	chloroplasts
nucleus	vacuole	chromatin
nucleolus		

- State the function of each structure and organelle in a cell.
- Label a diagram of a plant cell and an animal cell.
- Describe the differences between a plant cell and an animal cell in their structure, organelles, shape.

**The Life Cycle of the Cell (Chapter 3.5 p 95-102)**

anaphase	chromosomes	metaphase	prophase
cell cycle	cytokinesis	mitosis	spindle fibers
centrioles	interphase	nuclear membrane	telophase
chromatin			

- State the three stages of the cell cycle in the order they occur.
- Describe what happens during each stage of the cell cycle.
- In which stage of the cell cycle does a cell spend most of its life?
- State what happens during mitosis in one sentence.
- State the four stages of mitosis in the order they occur.
- Describe what happens during each stage of mitosis.
- Label a diagram of each stage of mitosis.

**The Discovery of the Cell (Chapter 2.3 p 50-55).**

cell theory	Anton von Leeuwenhoek	Matthias Schleiden
Robert Hooke	Theodore Schwann	Virchow

- What is the basic unit of structure and function of all living things?
- Recognize the parts of the cell theory.
- What are the discoveries of the scientists or their contributions to the cell theory.