

DUE Wed 10/1

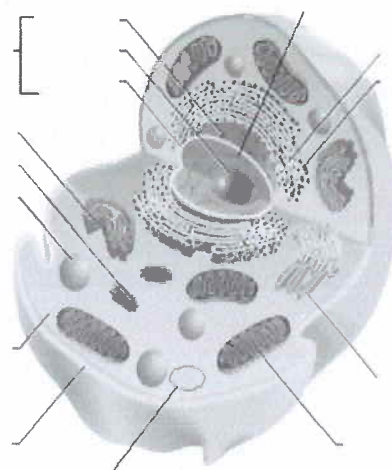
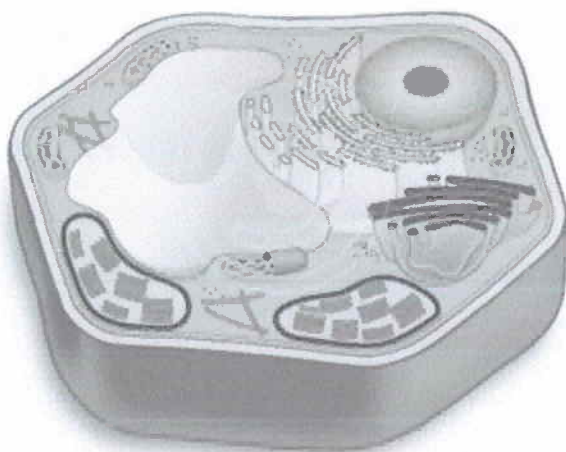
Test Thurs 10/2

Heading! }

Unit 1 Review:

1) Describe the Cell Theory: (Chapter 1 Lesson 1)

2) Label all cell parts:



3) List all organelles and their functions

Organelle	Function

4) Describe and name all phases of the cell cycle

Phase #	Phase Name	Description of what happens in this phase
1		
2		
3		
4		
5		
6		

5) What is the difference between cellular respiration and photosynthesis?

6) Understand how to read a scientific article pulling out & highlighting the steps of the scientific method.

Chapter Review

Cell Structure and Function

CHAPTER 1

Part A. Vocabulary Review

Directions: Write the unscrambled word next to the scrambled word on the lines below. Use these words to fill in the blanks in the sentences that follow.

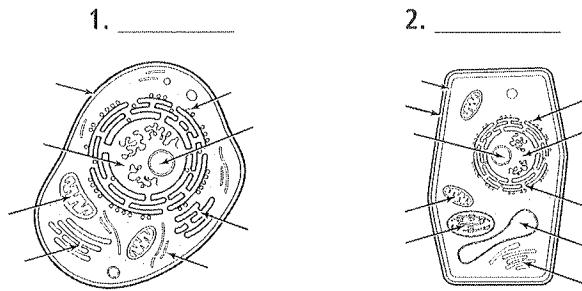
carbohydrates	chromosomes	cilia	cytoplasm
homeostasis	lipid	microscope	nucleic acids
organelles	photosynthesis	proteins	vesicle
_____	peocsimcro	_____	ellosgrane
_____	liaic	_____	sevicel
_____	seintorp	_____	splamotyc
_____	dipli	_____	dycrabetohars
_____	moshrecooms	_____	licenuc sciad
_____	stopsintheshoy	_____	omstisheoas

- The invention of the _____ allowed scientists to learn about cells.
- Cells maintain their internal environment through _____.
- _____ are structures in cells with specific functions.
- The genetic material of the cell is contained in its _____.
- Some one-celled organisms move by coordinating numerous _____.
- _____ are made of sugar molecules.
- Fat is a type of _____.
- _____ are molecules necessary for nearly every cell function.
- During _____, light energy, water, and carbon dioxide combine to make sugars.
- Proteins are made using long chains of molecules called _____.
- Inside the cell is the _____, a thick fluid made mostly of water.
- A _____ transports molecules throughout the cell.

Chapter Review CONTINUED

Part B. Concept Review

Directions: Compare the diagrams of plant and animal cells. Write P above the plant cell and A above the animal cell. Then categorize the cell parts from the numbered list as belonging to plant cells, animal cells, or both by writing the number of each part beside the arrow pointing to it.



- | | | | |
|--------------------------|--------------------|-----------------|-----------------|
| 3. cell membrane | 4. cell wall | 5. chloroplast | 6. cytoskeleton |
| 7. endoplasmic reticulum | 8. Golgi apparatus | 9. mitochondria | 10. nucleolus |
| 11. nucleus | 12. ribosomes | 13. vacuole | |

14. **Demonstrate** your understanding of cellular respiration and the production of ATP by presenting the three steps.

15. **Consider** how the cell theory must have changed people's understanding of living things. Write your thoughts in the space provided.

16. **Compare** prokaryotic cells and eukaryotic cells.

17. **Contrast** lactic acid fermentation and alcohol fermentation by describing two differences.

Chapter Review

From a Cell to an Organism

CHAPTER 2

Part A. Vocabulary Review

Directions: Determine whether each statement below is true or false. If the statement is correct, write 1 in the blank. If it is false, change the italicized word or words to make the statement correct and write the replacement in the blank at the left.

- _____ 1. *Mitosis* is the process by which the cytoplasm divides.
- _____ 2. *Stem cells* can become many different types of cells.
- _____ 3. During *cytokinesis*, two complete nuclei are formed.
- _____ 4. Pairs of similar chromosomes are called *centromeres*.
- _____ 5. *Sister chromatids* separate during anaphase.
- _____ 6. Following cytokinesis, two identical *cell plates* are formed.
- _____ 7. *Cell differentiation* results in specialized cells.
- _____ 8. In plants, a *kalanchoe* forms between the two new nuclei.
- _____ 9. The *cell cycle* includes interphase, mitosis, and cytokinesis.

Part B. Concept Review

Directions: Arrange the steps of mitosis described below in order by writing the correct number (1–4) and phase name in each blank.

- _____ 1. New nuclear membranes form and chromosomes become less tightly coiled.
- _____ 2. Sister chromatid pairs line up across the center of the cell.
- _____ 3. DNA in sister chromatids twists into coils and nuclear membranes break apart.
- _____ 4. Sister chromatid pairs separate and move to opposite ends of the cell.

Chapter Review CONTINUED

Directions: Respond to each statement below in complete sentences.

5. **Compare** and **contrast** cell organization and function in a one-celled eukaryote and in a human muscle cell.

6. **Distinguish** between the three stages of interphase. Name each stage and its function.

7. **Conclude** why cell division is important.

8. **Arrange** the cell groupings of tissue, organ, organ system, and organism in order by increasing level of complexity, and describe how each relates to the others.

9. **Speculate** about why stem cell research is valuable in modern medical science.

10. **Choose** two organ systems in your body, and describe the function of each.

11. **Compare** and **contrast** plant organs and human organs.

* Short Answers on Test:

- Describe Cellular Respiration
- Explain why photosynthesis is important to humans

22 From a Cell to an Organism

- Georgia falls & cuts her elbow. Specify the processes that create new skin cells, explain each. (Hint: cell cycle)