Name _____ Date _____ Period _____

Chapter 5.1 Level Guide I (pp 92-96)
What are Cells?

Level I Directions: Read each statement carefully. Using your textbook, decide if the statement is true or false. If the statement is true, put **true** in the first blank and the page number in the second blank. If the statement is false, put **false** in the first blank and the page number in the second blank. Correct all statements that are false so that you have statements that are false so that you have true statements to help you study for your test.

True False	**Page**		
_____	_____	1.	A cell is the basic unit of structure and function in a living thing.
_____	_____	2.	Only some of the cells in your body share the characteristics of all living things.
_____	_____	3.	All cells in our body respond to their environment, grow, reproduce, and use energy.
_____	_____	4.	The first scientist to record his observations on cells was Anton van Leeuwenhoek.
_____	_____	5.	Robert Hooke named the square structures he saw under the microscope a *cell* because they reminded him of tiny rooms.
_____	_____	6.	Anton van Leeuwenhoek used his simple microscopes to be the first to observe protists, blood cells, and bacteria.
_____	_____	7.	Matthais Schleiden and Theodore Schwann looked at plant and animal tissue under the microscope then concluded all plants and animals are made of cells.
_____	_____	8.	Matthais Schleiden proposed that cells can only come from other cells.
_____	_____	9.	The "Fathers of the Cell Theory" are Hooke, Leeuwenhoek, Schleiden, Schwann, and Virchow.
_____	_____	10.	The cell theory is a theory that explains the relationship between cells and living things.
_____	_____	11.	Multicellular organisms have different types of single cells. These cells have a very special structure and function.
_____	_____	12.	There are different types of cells but all cells have different characteristics.
_____	_____	13.	All cells have a cell membrane that is a barrier between the inside of the cell and its environment.

Name _____ Date _____ Period _____

_____	_____	14.	All cells have organelles. Organelles are structures inside of a cell that helps the cell perform its functions.
_____	_____	15.	All cells contain micrometer. The cytoplasm is a fluid mixture that contains organelles.
_____	_____	16.	All cells contain DNA. DNA contains the instructions for making new cells, controls the cell functions, and can be passed on to new cells.
_____	_____	17.	All cells have been classified into two groups: plankton and eukaryotic.
_____	_____	18.	Prokaryotic means "before nucleus" so these cells do not have a nucleus.
_____	_____	19.	Scientists believe all cells came from eukaryotic cells.
_____	_____	20.	Eukaryotic means "true nucleus" so it has a nucleus and cell organelles.

Level Guide II: Chapter 5.1
What are Cells?

Level II Directions: Go back to the beginning of the chapter and repeat the process, paying close attention to the pictures, charts, and diagrams. Follow the same process to mark the blanks and remember to correct all false statements.

True False	**Page**		
_____	_____	1.	Figure 5.2 shows Robert Hooke's first drawings of cells.
_____	_____	2.	According to the picture on page 94, there are four parts to the cell theory.
_____	_____	3.	According to the picture on page 96, the DNA of a prokaryotic cell is bunched up in the center of the cell.
_____	_____	4.	Figure 5.5 shows that bacteria are made of eukaryotic cells.
_____	_____	5.	Figure 5.5 shows that eukaryotic cells have a nucleus and prokaryotic cells do not have a nucleus.

Name _____ Date _____ Period _____

Level III Guide: Chapter 5.1
What are Cells?

Level III Directions: Using your prior knowledge and what you have learned from this section, make a double bubble map comparing and contrasting prokaryotic cells and eukaryotic cells.