Name: _____ Date: _____ Period: _____

Cell Structure Internet Lesson

Directions: Answer the following question by visiting the web site below.
http://www.wiley.com/legacy/college/boyer/0470003790/animations/cell_structure/cell_structure.htm

Introduction

1) List the 3 types of cells you will be comparing in today's lesson.

   a. _____ b. _____ c. _____

Click **PROKARYOTIC CELL**

2) **Prokaryotic Cell:** Move the mouse over the parts to the cell and answer the following questions.
   a. Which part is the region where metabolic reactions take place? _____
   b. Which part stores genetic information? _____
   c. Which part protects the cell against stress? _____
   d. Which part helps move the cell? _____
   e. Which **TWO** parts help the cell during sexual conjugation? _____
   f. Which parts are the sites of protein synthesis (translation)? _____
   g. Which part allows material to enter/exit a cell? _____
   h. Which part allows cells to adhere (stick) to surfaces? _____

Click CONTINUE and try to answer the 6 "Pop Up Questions" without looking at your paper for help.

#1) Answer: _____ #4) Answer: _____

#2) Answer: _____ #5) Answer: _____

#3) Answer: _____ #6) Answer: _____

After the quiz, click ANIMAL CELL to move onto the animal cell.

3) **Animal Cell:** Move the mouse over the parts to the cell and answer the following questions.
   a. Where does DNA replication and transcription take place? _____
   b. Which cell part provides shape for the cell? _____
   c. Which part creates energy and ATP? _____
   d. Which part helps secrete waste products from the cell? _____
   e. Which parts helps transport liquids and nutrients around the cell? _____
   f. Which stores genetic information? _____
   g. Where do ribosomes attach during protein synthesis (translation)? _____
   h. Which cell part allows nutrients and waste to enter/exit? _____

Click <u>CONTINUE</u> and try to answer the 7 "Pop Up Questions" without looking at your paper for help.

#1) Answer: _____
#2) Answer: _____
#3) Answer: _____
#4) Answer: _____
#5) Answer: _____
#6) Answer: _____
#7) Answer: _____

After the quiz, click <u>PLANT CELL</u> to move onto the plant cell.

4) **Plant Cell:** Move the mouse over the parts to the cell and answer the following questions.
   a. Which part performs photosynthesis? _____
   b. Which part stores nutrients and water? _____
   c. What are the sites of protein synthesis (translation)? _____
   d. Which is a transport system for liquids and nutrients? _____
   e. Which part converts light into chemical energy? _____

Click <u>CONTINUE</u> and try to answer the 7 "Pop Up Questions" without looking at your paper for help.

#1) Answer: _____
#2) Answer: _____
#3) Answer: _____
#4) Answer: _____
#5) Answer: _____
#6) Answer: _____
#7) Answer: _____

After the quiz, click <u>CONSTRUCT A CELL</u>

Construct the prokaryotic cell first.

5) Which 5 cell parts did you include in your PROKARYOTE diagram?
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____

Construct the animal cell next.

6) Which 6 cell parts did you include in your ANIMAL CELL diagram?
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____
   f. _____

Construct the plant cell last.

7) Which 8 cell parts did you include in your PLANT CELL diagram?
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____
   f. _____
   g. _____
   h. _____