

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](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 CONTINUE and try to answer the 7 "Pop Up Questions" without looking at your paper for help.

#1) Answer: \_\_\_\_\_ #5) Answer: \_\_\_\_\_

#2) Answer: \_\_\_\_\_ #6) Answer: \_\_\_\_\_

#3) Answer: \_\_\_\_\_ #7) Answer: \_\_\_\_\_

#4) Answer: \_\_\_\_\_

After the quiz, click PLANT CELL 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 CONTINUE and try to answer the 7 “Pop Up Questions” without looking at your paper for help.

#1) Answer: \_\_\_\_\_ #5) Answer: \_\_\_\_\_

#2) Answer: \_\_\_\_\_ #6) Answer: \_\_\_\_\_

#3) Answer: \_\_\_\_\_ #7) Answer: \_\_\_\_\_

#4) Answer: \_\_\_\_\_

After the quiz, click CONSTRUCT A CELL

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. \_\_\_\_\_