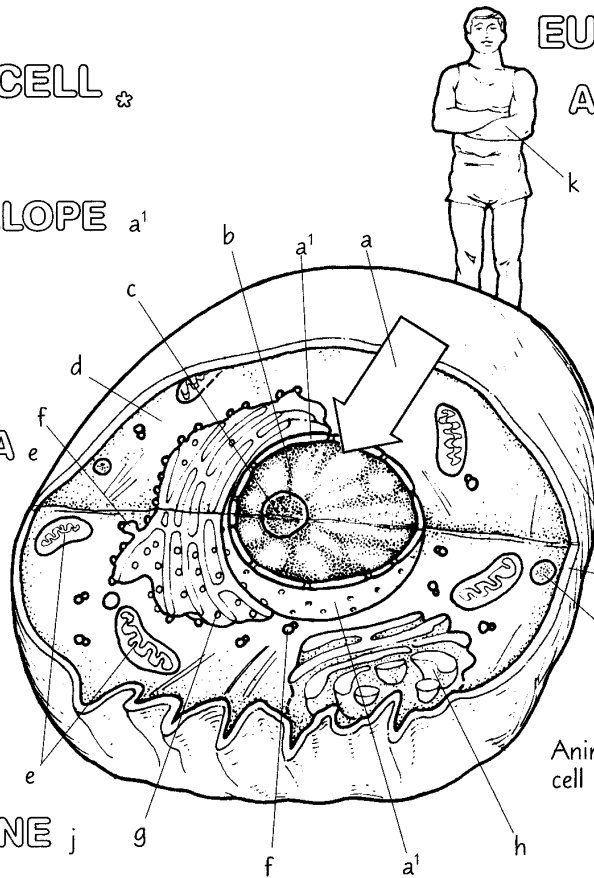


**Cell Biology**  
**Prokaryotes and Eukaryotes**

Name: \_\_\_\_\_  
 Period: \_\_\_\_\_

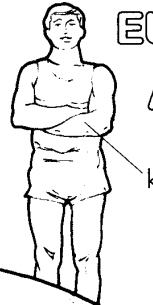
**EUKARYOTIC CELL** ☆

- NUCLEUS a
- NUCLEAR ENVELOPE a'
- CHROMATIN b
- NUCLEOLUS c
- CYTOPLASM d
- MITOCHONDRIA e
- RIBOSOME f
- ENDOPLASMIC RETICULUM g
- GOLGI APPARATUS h
- LYSOSOME i
- CELL MEMBRANE j

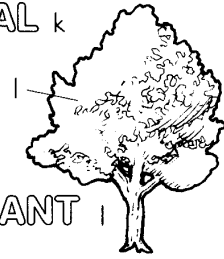


**EUKARYOTES** ☆

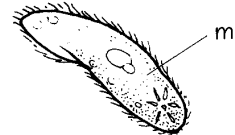
ANIMAL k



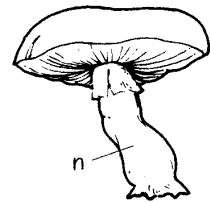
PLANT l



PROTOZOAN m



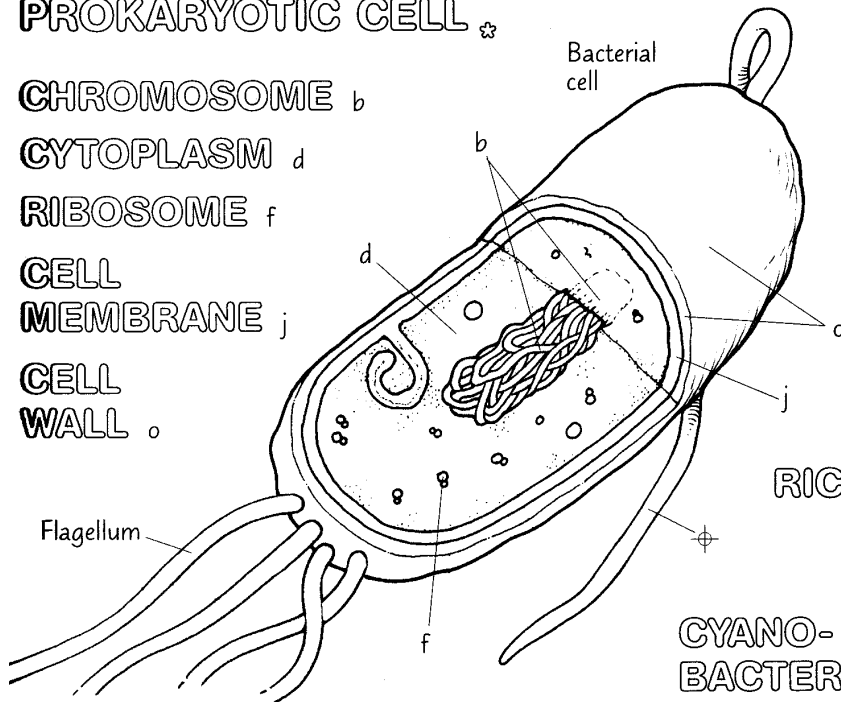
FUNGUS n



Animal cell

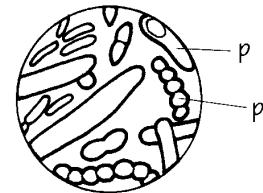
**PROKARYOTIC CELL** ☆

- CHROMOSOME b
- CYTOPLASM d
- RIBOSOME f
- CELL MEMBRANE j
- CELL WALL o

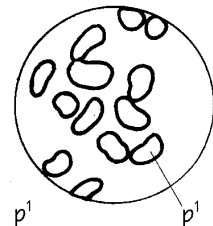


**PROKARYOTES** ☆

BACTERIUM p



RICKETTSIA p<sup>1</sup>



CYANO-BACTERIUM p<sup>2</sup>



## Cell Biology

Name: \_\_\_\_\_

### Prokaryotes and Eukaryotes

Period: \_\_\_\_\_

*For this assignment, you will be comparing the characteristics of prokaryotes and eukaryotes. Fill in the blanks below using information you find on the coloring page of this assignment. Check off each box  as you finish that part of the instructions.*

1. On the coloring page, what are the examples of organisms (k, l, m, n) that have eukaryotic cells?

\_\_\_\_\_

2. Color the words EUKARYOTIC CELL and EUKARYOTES in brown . Color each of the four examples using colors that make them look realistic .

3. Look at the tiny labeling for the eukaryotic cell. What kind of organism is it from? \_\_\_\_\_

4. Look at the tiny labeling for the prokaryotic cell. What kind of organism is it from? \_\_\_\_\_

5. Color the words PROKARYOTIC CELL and PROKARYOTES in orange . Bacteria are usually stained pink so they can be seen with a microscope, so color each of the three examples in the circles in pink .

6. Now it is time to start closely examining the similarities and differences between these two types of cells. Look down the list of the parts for each of the two cells. They both have 4 label *letters* in common. Below, list the diagram's *letters* for the labels of these parts, as well as the name of the part.

the letter \_\_\_\_\_ stands for both \_\_\_\_\_ and \_\_\_\_\_

the letter \_\_\_\_\_ stands for \_\_\_\_\_

the letter \_\_\_\_\_ stands for \_\_\_\_\_

the letter \_\_\_\_\_ stands for \_\_\_\_\_

7. Use 4 different colors to color these cell parts, one color for each different part .

8. DNA is found in each of the structures marked "b" on your coloring page. In a eukaryotic cell, the DNA is in something called chromatin (b). What organelle (a) is the DNA stored in? \_\_\_\_\_

9. In the prokaryotic cell, the DNA is stored in something that looks like spaghetti (b) in the center of the cell. What is this part of a prokaryotic cell called? \_\_\_\_\_

10. What membrane-bound organelle stores DNA in a eukaryotic cell, but is not in any prokaryotic cell? The organelle is the \_\_\_\_\_.

11. For a eukaryotic cell to divide in order to multiply itself, the DNA must divide in half and move to opposite sides of the cell during mitosis. What organelle (a) must temporarily break apart so that the DNA can divide up? \_\_\_\_\_