

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

### Section 1.3

Please read the textbook pages and fill in the missing information.

1. Cells are classified into two types of cells, \_\_\_\_\_ and \_\_\_\_\_ cells.
2. The main difference between a prokaryotic cell and a eukaryotic cell is that a prokaryotic cell does not have a \_\_\_\_\_.
3. Prokaryotic cells are \_\_\_\_\_ than eukaryotic cells. They also have fewer \_\_\_\_\_.
4. A prokaryotic cell's DNA is located in a region called the \_\_\_\_\_.
5. Eukaryotic cells are about \_\_\_\_\_ times as large as prokaryotic cells, and they are more \_\_\_\_\_.
6. A eukaryotic cell is a type of cell whose nucleus and other internal parts are surrounded by \_\_\_\_\_.
7. Example of a prokaryotic cell \_\_\_\_\_. Example of a eukaryotic cell \_\_\_\_\_.
8. Bacteria have a \_\_\_\_\_, \_\_\_\_\_ that surround its jelly-like \_\_\_\_\_.
9. Genetic material and protein-making structures called \_\_\_\_\_ float within the cytoplasm.
10. Archaea are similar to bacteria in that they lack a \_\_\_\_\_ and have a \_\_\_\_\_ wall. However, molecules found in archaea are more like the molecules found in \_\_\_\_\_ cells than those of \_\_\_\_\_ cells.
11. \_\_\_\_\_ can survive in extreme environments.
12. Plant cells have two more organelles than animal cells, \_\_\_\_\_ and \_\_\_\_\_.
13. \_\_\_\_\_ are bean-like structures that power the cell. They are responsible for the process of \_\_\_\_\_.
14. \_\_\_\_\_ transport material around the cell. In regards to school, they are similar to \_\_\_\_\_.
15. \_\_\_\_\_ are balloon-like spaces within cytoplasm that store \_\_\_\_\_, \_\_\_\_\_, and others. Plant cells have \_\_\_\_\_, while animal cells have \_\_\_\_\_ and more numerous throughout the cell.
16. \_\_\_\_\_ provide a tough rigid structure for plant cells.
17. \_\_\_\_\_ protect the contents of cells. In a classroom, they are similar to either a \_\_\_\_\_ or \_\_\_\_\_.
18. \_\_\_\_\_ is the brain of the cell. It houses the \_\_\_\_\_, which controls a cell's \_\_\_\_\_, \_\_\_\_\_, and other like-sustaining activities.
19. \_\_\_\_\_ captures the energy in \_\_\_\_\_. This energy is needed for the process of \_\_\_\_\_ to occur.
20. \_\_\_\_\_ is a chemical reaction that uses the energy of sunlight to change \_\_\_\_\_ and \_\_\_\_\_ into \_\_\_\_\_ and \_\_\_\_\_.
21. The equation for photosynthesis is as follows  
a. \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ → \_\_\_\_\_ + \_\_\_\_\_
22. During photosynthesis, sugar (energy) is \_\_\_\_\_, while \_\_\_\_\_ is expelled as a waste product.
23. \_\_\_\_\_ is a chemical reaction in which sugar and oxygen in cells are changed into \_\_\_\_\_ and \_\_\_\_\_. As a result of this process, \_\_\_\_\_ is released, which allows an organism to carry out life processes. \_\_\_\_\_ and \_\_\_\_\_ are waste by-products.