Name _____ Class _____ Date _____

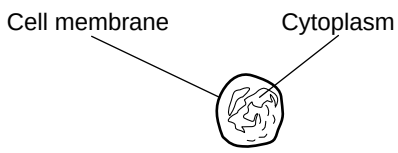
Reviewing Key Concepts

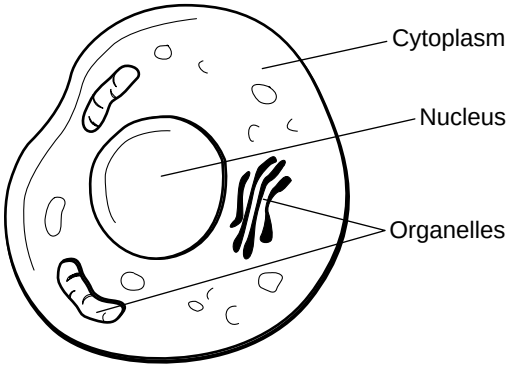
Completion *On the lines provided, complete the following sentences.*

1. All _____ are composed of cells.
2. Cells are the basic units of _____ and _____ in all organisms.
3. New cells are produced from _____.
4. The cells of eukaryotes have a(an) _____; the cells of _____ do not.
5. Eukaryotic cells also have a variety of specialized structures called _____.

Reviewing Key Skills

Classifying *On the lines provided, label each cell as either* prokaryotic *or* eukaryotic.





6. _____ 7. _____

8. **Calculating** The smallest bacterium is 0.2 micrometers across, while the giant amoeba *Chaos chaos* is 1000 micrometers across. How many times larger is the giant amoeba than the smallest bacterium?

_____

9. **Comparing and Contrasting** Explain the similarities and differences between a prokaryotic cell and a eukaryotic cell.

_____

_____

_____

10. **Applying Concepts** Are human cells prokaryotic or eukaryotic? Explain your answer.

_____

_____

Name _____ Class _____ Date _____

Reviewing Key Concepts

Matching *On the lines provided, match the structure with its function in the cell.*

a. cell wall
b. nucleus
c. cytoskeleton
d. endoplasmic reticulum
e. Golgi apparatus
f. chloroplast
g. mitochondrion

_____ **1.** controls most cell processes and contains DNA

_____ **2.** uses energy from food to make high-energy compounds

_____ **3.** provides support and protection for the cell

_____ **4.** maintains cell shape with a network of protein filaments

_____ **5.** uses energy from sunlight to make food molecules

_____ **6.** site where lipid components of the cell membrane are assembled and where proteins are chemically modified

_____ **7.** modifies, sorts, and packages proteins and other materials from the ER

Reviewing Key Skills

8. Inferring Plants have cells that contain chloroplasts. Why must their cells contain mitochondria as well?

_____

_____

_____

9. Using Analogies In some ways, a cell is analogous to a factory. Create an analogy describing the job of a lysosome within a cellular "factory."

_____

_____

_____

10. Comparing and Contrasting What structures make plant and animal cells different?

_____

_____

_____

_____