Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. At what level of organization does life begin? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What surrounds all cells? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is meant by semipermeable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What 2 things make up the cell membrane? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. The cell membrane is also called the
\_P\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ membrane.
6. Centrioles are found inside of what type of cell? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What additional layer is found around the outside of plant cells and bacteria?
8. Centrioles are found at the center of the
\_C\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_\_. How do they help the cell?
9. Where is DNA found inside a cell?
10. What cell process is controlled by the nucleus?
11. DNA coils tightly during division and assembles into visible
 \_C\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_.
12. Where are organelles located?
13. Where are proteins made in a cell? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. Do all cells need ribosomes?
15. The process of making proteins is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. Rough ER is connected to the \_\_\_\_\_\_\_\_\_\_\_\_\_ membrane and to \_\_\_\_\_\_\_\_\_\_ER.
17. Proteins made by rough ER travel to the Golgi in sacks called \_\_\_\_\_\_\_\_\_\_\_\_\_. Golgi \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ proteins for export out of the cell.
18. Give 3 jobs for smooth ER.
19.
20.
21. What process takes place inside chloroplasts?
22. What is the energy for this process?
23. What pigment traps the energy?
24. Chloroplasts are found in what type of cell(s)?
25. Both chloroplasts and mitochondria are like in that they both have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ membranes and their own \_\_\_\_\_\_\_.
26. Food, water, and wastes are stored inside \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
27. Digestion takes place inside \_\_\_\_\_\_\_\_\_\_\_\_\_ containing \_\_\_\_\_\_\_\_\_\_\_\_\_.
28. The largest organelle in plants is the \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_.
29. What organelle breaks down and recycles worn out cells?

