Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per: \_\_\_\_\_\_\_\_\_

Cell and Cell Transport Review

*Part 1: label the cells and organelles in the images below*



*Part 2: List the function of the organelles that you labeled above and tell what organ in the human body would have a similar function*

|  |  |  |
| --- | --- | --- |
| **Organelle** | **Function** | **Human body analogy** |
| Nucleus |  | Brain |
| Ribosome |  |  |
| Mitochondria |  |  |
| Cell membrane |  |  |
| Flagella |  |  |
| \* Cell wall |  |  |
| Cytoplasm |  |  |
| Vacuole |  |  |
| \* Chloroplast |  |  |
| Golgi apparatus |  |  |
| Lysosome |  |  |
| Endoplasmic Reticulum |  |  |

\* = organelles that are found only in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Part 3: In the chart below, check the appropriate box with an “X” if it has the structure. Some may have more than one “X”*

|  |  |  |
| --- | --- | --- |
| **Cell Features** | **Prokaryotic Cell** | **Eukaryotic Cell** |
| Has a nucleus and other membrane bound organelles |  |  |
| Has a cell membrane |  |  |
| Includes bacteria |  |  |
| Includes plant cells |  |  |
| Includes animal cells |  |  |
| Is unicellular |  |  |
| Is multicellular |  |  |

Part 4: Fill in the chart below for active and passive transport

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Transport** | **Movement of molecules** | **Energy requirements** | **Process** |
|  |  |  | 1.2.3. Facilitated diffusion |
|  |  |  | 1.2. Exocytosis |

Part 5: match each term in column A with its meaning in column B. Write the letters on the line

**Column A Column B**

\_\_\_\_\_\_\_\_ 1. Diffusion A. Makes protein

\_\_\_\_\_\_\_\_ 2. Selectively permeable B. Converts sunlight into chemical energy

\_\_\_\_\_\_\_\_ 3. Cell membrane C. Can limit the kinds of molecules that pass through

\_\_\_\_\_\_\_\_ 4. Phospholipid D. When substances, in a vesicle, are discharged from cell

\_\_\_\_\_\_\_\_ 5. Isotonic E. type of endocytosis where a cell engulfs a solid particle

\_\_\_\_\_\_\_\_ 6. Hypertonic F. The movement of molecules from an area of high concentration to low concentration

\_\_\_\_\_\_\_\_ 7. Hypotonic G. Makes up the cell membrane

\_\_\_\_\_\_\_\_ 8. Mitochondria H. Equal concentration inside and outside the cell

\_\_\_\_\_\_\_\_ 9. Chloroplast I. Movement of water inside a cell, causes cell to swell

\_\_\_\_\_\_\_\_ 10. Flagella J. Type of endocytosis where a cell engulfs fluids

\_\_\_\_\_\_\_\_ 11. Cilia K. Whip-like tail used for movement

\_\_\_\_\_\_\_\_ 12. Ribosome L. Movement of water from areas of high concentration to areas of low concentration

\_\_\_\_\_\_\_\_ 13. Phagocytosis M. Controls the cells activities

\_\_\_\_\_\_\_\_ 14. Osmosis N. Movement of water outside a cell, causes cell to shrink

\_\_\_\_\_\_\_\_ 15. Pinocytosis O. Tiny hairs used for movement

\_\_\_\_\_\_\_\_ 16. Exocytosis P. Controls what goes in and out of a cell

\_\_\_\_\_\_\_\_\_ 17. Endocytosis Q. When a cell takes substances inside by enclosing them by the membrane