

Period 2  
Oct. 28

**Review Questions:**

1. Match the cell parts in the first column with the descriptions in the second column. Each cell part and description should be used only once.

Cell Structure	Description
<del>A. Ribosome</del>	<u>O</u> Anchors organelles, holds nucleus in place
<del>B. Golgi apparatus</del>	<u>U</u> Released by the Golgi apparatus, travels to the surface of the cell to release its contents
<del>C. Nucleolus</del>	<u>A</u> Synthesizes proteins
<del>D. Microtubules</del>	<u>C</u> Where ribosomes are made
<del>E. Cell membrane</del>	<u>K</u> Controls cell function and site of DNA storage
<del>F. Rough ER</del>	<u>D</u> Allows movement of organelles within the cell
<del>G. Centriole</del>	<u>H</u> Shuttles proteins between organelles
<del>H. Transport vesicles</del>	<u>Q</u> Provides storage of water, chemicals, and wastes in plant cells
<del>I. Mitochondrion</del>	<u>E</u> Controls passage of molecules in and out of the cell
<del>J. Flagella</del>	<u>F</u> Where proteins are made
<del>K. Nucleus</del>	<u>G</u> Organizes the spindle in cell division
<del>L. Smooth ER</del>	<u>P</u> Converts solar energy to useable cell energy
<del>M. Cell wall</del>	<u>S</u> Allows contraction and movement of cells
<del>N. Lysosome</del>	<u>J</u> Allows the cell to move in space
<del>O. Microfilament</del>	<u>L</u> Synthesizes and transports lipids
<del>P. Chloroplast</del>	<u>M</u> Shapes plant cells
<del>Q. Central vacuole</del>	<u>B</u> Modifies and exports proteins
<del>R. Chromosome</del>	<u>I</u> Converts the energy from nutrients into ATP
<del>S. Intermediate filaments</del>	<u>L</u> Digests food vacuoles and damaged organelles
<del>T. Organelle</del>	<u>R</u> Stores genetic information, located in nucleus
<del>U. Secretory vesicles</del>	<u>I</u> General name for structures in the cytoplasm

- 1. plants have chloroplasts,
- 2. plants have cell walls
- 3. plants have large vacuoles, animals
- 4. animal cells have more mito-<sup>chondria</sup>
- 5. animal more with flagella or cilia
- 6. animal cells have multiple shapes and functions
- 7. plants cells make their own food

- 2. List seven differences between plant and animal cells
- 3. Describe the steps by which a protein is first synthesized, and then exported by a cell.

① Ribosomes in Rough ER ② Transport vesicle moves proteins ③ Golgi apparatus exporting

- 4. Is the plasma membrane the outer boundary of all cells?  
No, plant cells have a cell wall
- 5. How might it benefit an organism to have the nucleus near the centre of its cells?  
control center should be close to all parts of a cell
- 6. Label all the major structures in each of the following diagrams. Can you determine which cell is the plant cell and which cell is an animal cell?

