

Period 5

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>S/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/O</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>N</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>T</u> General name for structures in the cytoplasm

1. plants have chloroplasts    4. Plant cells have 1 large central vacuole
2. plant cells have cell walls    5. animal cells have lysosomes
3. animal cells have more mitochondria    6. animal cells have flagella
7. plant cells are more boxy (defined shaped)
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 made by ribosomes    ② Transport vesicles move them to Golgi A.    ③ Golgi A. modifies and exports.
4. Is the plasma membrane the outer boundary of all cells?  
**No! Plant cells have the cell wall around cell membranes**
5. How might it benefit an organism to have the nucleus near the centre of its cells?  
**Protection and to help send signals**
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?

