Cell structures gizmo vocab

Cell WallThe rigid, porous, outer layer of a plant cell made primarily of cellulose. CentriolesThese are made of a bundle of microtubules that helps organize the movement of chromosomes during cell division; These structures always occur in pairs. ONCELL STRUCTURES GIZMO VOCAB SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder NowChloroplastAn organelle that uses water, carbon dioxide, and chlorophyll to convert the radiant energy of the Sun into chemical energy, resulting in the formation of glucose, through the process of photosynthesis. CytoplasmA jelly-like substance, composed mainly of water, occupying most of the interior space between the cell membrane and other structures inside the cell. Endoplasmic ReticulumA network of maze-like, membrane-bound passageways connected directly to the nuclear envelope in which chemical compounds are manufactured, processed, and transported. Golgi apparatusA stack or set of flattened membrane " sacks" that collect, modify, and package chemical compounds and send them on to new destinations within the cell or prepare them for export outside of the cell. LysosomeA small sac (vesicle) that contains digestive chemicals called enzymes (special type of protein that helps break down molecules). MitochondriaOrganelles that, using oxygen, convert the chemical energy stored in glucose into a form of energy known as ATP that can be readily be used by the cell. Nuclear EnvelopeA double-layered membrane that surrounds and protects the nucleus; controls what can enter and exit the nucleus. NucleolusA small region inside the nucleus--usually darker than the rest of the nucleus--where ribosomes are synthesized (made). NucleusA membrane-bound region in the cell that contains DNA (chromosomes) and the nucleolus and directs the cell's activities; the control center of the cell. OrganelleA membrane-bound cell structure that performs

a specific function. Note: quite often, this term is used incorrectly to refer to ANY cell structure. Plasma MembraneA double-layered membrane that surrounds the cell. Also called the cell membrane, it regulates what enters and leaves the cell and helps the cell maintain homeostasis. Structurally, it is made of a phospholipid bi-layer. PlastidsSmall structures found only in plant cells. May be found inside other organelles. Three main types:

1. leucoplast: stores food
2. chloroplast: houses the green pigment chlorophyll involved in photosynthesis.
3. chromoplast: houses other pigments not involved in photosynthesis.

RibosomeA tiny structure made of rRNA that synthesizes (makes) proteins. Some of these tiny structures are found attached to the endoplasmic reticulum, while others float freely in the cytoplasm. Large Central VacuoleA large membrane-bound sac found in plant cells that stores water, nutrients, waste products, and other chemicals. In plant cells, this structure helps the cells maintain their shape via turgor pressure. VesicleA small package of nutrients or proteins that pinches off either from the endoplasmic reticulum or from the Golgi apparatus and carries the contents to another part of the cell. Transport VesicleA special type of vesicle that pinches off from the endoplasmic reticulum and carries contents to the Golgi body, or pinches off from the Golgi and carries the contents to some other destination INSIDE the cell. Secretory VesicleA special type of vesicle that pinches off from the Golgi body and carries contents to the cell membrane for export OUTSIDE the cell. Rough ERThe part of the endoplasmic reticulum located closest to the nucleus that is covered with embedded ribosomes that build proteins.

Smooth ERThe part of the endoplasmic reticulum located farthest from the nucleus; NOT covered with embedded ribosomes.