

CELL PARTS AND FUNCTIONS

Cell Part	Function	Description of Structure	NAME			Works with Part of
			Prokaryote	In Plants	In Animals	
Ribosomes	tiny organelles found in the cytoplasm and rough ER, manufactures proteins out of amino acid monomers	Produced by the nucleolus out of RNA fragments	x	x	x	Teachers Rough ER, RNA
Cell wall	Tough fibrous tissue that forms the outer boundary of a plant cell. Provides support	made of cellulose in plants and chitin in fungi	x	x		Gates cell membrane, plasmodesmata
Nucleoid	A mass of nucleic acid which stores hereditary info for the production of proteins	Concentration of genetic material in prokaryote which has no nucleus	x			See Cell Coloring and Textbook found in cytoplasm of prokaryotic cell
Nucleus	A membranous organelle that is the genetic control center of the cell	A double membrane encloses the nucleus, nuclear pores are holes in the membrane that allow material in and out. Rough ER is connected to outer membrane	x	x		Office chromatin, nucleolus
Chromatin	Unwound DNA found in nucleus, hereditary code for the production of proteins	DNA attached to proteins, but unwound, located inside nucleus	x	x	x	See Cell Coloring and Textbook nucleus, RNA, proteins
Nuclear envelope	Encloses the nucleus and controls the flow of material in and out of it	Double membrane perforated with pores called nuclear pores, connects to rough ER	x	x		See Cell Coloring and Textbook nucleus, nuclear pores
Nucleolus	produces ribosomes	Found in the nucleus, mass of fibers and granules	x	x		See Cell Coloring and Textbook nucleus, chromatin
Rough ER	produces phospholipids for membranes, finalizes the production of proteins and secretes them in transport	membranous organelle covered in ribosomes, connected to outer layer of nucleus	x	x		See Cell Coloring and Textbook nucleus, ribosomes, endomembrane system