

Physiology 31 – Cellular Structure & Function Worksheet

To review cell structures and their functions, use your textbook and lab manual to fill in the missing squares in the table.

Cell Structure	Description	Function
Plasma membrane	Phospholipid bilayer studded with proteins; surrounds the cell	
	Large organelle surrounded by a double layered, porous nuclear envelope, and containing chromosomes	
Nucleolus	Spherical organelle within the nucleus	
Ribosomes	Tiny spherical bodies composed of RNA & protein	
Endoplasmic reticulum		Protein & lipid synthesis
- Smooth ER	Membranous tubes without ribosomes	
- Rough ER	Membranous tubes with ribosomes embedded	
Golgi apparatus	Stack of flattened membranous sacs near the ER	
	Small, spherical bodies containing acidic hydrolytic enzymes	
Peroxisomes	Small, spherical bodies containing oxidase enzymes	
	Hotdog shaped bodies with smooth outer membrane, folded inner membrane, & many respiratory enzymes	
Centrioles	Paired cylindrical bodies near the nucleus	
	Fibrous proteins including microfilaments, intermediate filaments, & microtubules	Provide cellular support and movement
Inclusions (nonmembrane bound substances)		Some used as energy sources