Prokaryotic and Eukaryotic Cell Structures and Functions

Structure	Function	Types of Cells	Types of Cells (select all that apply) Prokaryotic Cells Eukaryotic Cells Plant Cells Animal Cells				
		Prokaryotic Cells	Eukaryotic Cells	Plant Cells	Animal Cells		
actin filaments							
cell envelope							
'							
cell wall							
central vacuole							
				<u> </u>			
centrioles							

Structure centrosome	Function	ion Types of Cells (select all that apply)			
centrosome					
chloroplast					
chromatin					
om om a m					
cilia					
conjugation pili					
cytoplasm					

Structuro	Function Types of Cells (select all that apply)				
Structure cytoskeleton	Tunction				
and an leave in reticulum (an)					
endoplasmic reticulum (er)					
flagella					
glycocalyx					
grycocaryx					
Golgi apparatus					
intermediate filaments					

Structure	Function Types of Cells (select all that apply)				
Structure lysosome	T dilotion				
microtubules					
mitochondrion					
nuclear envelope					
Theorem envelope					
nual a alua					
nucleolus					
nucleus					

Structuro	Function Types of Cells (select all that apply)				
Structure peroxisome	Tunction				
•					
plasma membrane					
process and the same					
plasmids					
piasifilas					
wild a a a ma a a					
ribosomes					
rough er					
smooth er					
		I .	I	1	·

Structure thylakoids	Function	Types of Cell	Types of Cells (select all that apply)			
thylakoids	i dilotion					
vesicle						
Figure 4.6 Typical animal cell. Micrograph and drawing of a generalized animal cell (below).	of a human cell (right)		NG			
and drawing or a generalized drillinal cell (below).			micrograph of a v	Typical plant cell. False-o young plant cell (left) and draw	olored wing of a	
			nucleus	t cell (below).		
	nuclear envelope		peroxisome			
	endoplasmic- reticulum		ribosomes			
	nucleolus— chromatin—		central vacuole			
			plasma membrane cell wall			
Plasma membrane: outer surface that			chloroplast			
regulates entrance and exit of molecules		4				
protein phospholipid	10,000×	12,300	0×			
	Nucleus: command center of cell - Nuclear envelope: double membrane with nuclear pores	Nucleus: command center of cell Nuclear envelope: double membrane with—		Central vacuole*: larg	ge, fluid-filled	
Cytoskeleton: maintains cell shape and assists movement	membrane with nuclear pores that encloses nucleus • Chromatin: diffuse threads	nuclear pores that encloses nucleus • Nucleolus: produces subunits of ribosomes —		helps maintain turgor p	oressure	
of cell parts: • Microtubules: protein	containing DNA and protein Nucleolus: region that produces subunits of ribosomes	Chromatin: diffuse threads containing DNA and protein		Cell wall of adjacent	cell	
cylinders that move organelles		Nuclear pore: permits passage of proteins into nucleus and ribosomal subunits out of nucleus				
Intermediate filaments: protein fibers that provide	Endoplasmic reticulum: protein and lipid metabolism Rough ER: studded with	Ribosomes: carry out protein synthesis				
stability of shape • Actin filaments: protein	ribosomes that synthesize proteins	Centrosome: microtubule organizing		- Chloropla out photos producing	st*: carries ynthesis, sugars	
fibers that play a role in cell division and shape	Smooth ER: lacks nbosomes, synthesizes lipid molecules	center (lacks centrioles) Endoplasmic				
Centrioles**: short	upa morecures Peroxisome: vesicle	reticulum: protein and lipid metabolism				
cylinders of microtubules	that is involved in fatty acid metabolism	Rough ER: studded with ribosomes that synthesize proteins	NA CONTRACTOR OF THE PARTY OF T	Mitochondrion that carries out	cellular	
Centrosome: microtubule organizing center that contains a pair of centrioles	Ribosomes: particles that carry	Smooth ER: lacks		respiration, prod ATP molecules		
Vester small membrane-	out protein synthesis Polyribosome: string of	ribosomes, synthesizes lipid molecules		Microtubules: protein cy that aid movement of org	ganelles	
and transports substances	nbosomes simulaneously synthesizing same protein	Peroxisome: vesicle that -/ is involved in fatty acid metabolism		Actin filaments: protein fibers that play a role in cell division and shape		
Lysosome*: vesicle that digests macromolecules and even cell parts		Golgi apparatus: processes,	X	and snape ma membrane: surrounds		
Cytoplasm: semifluid — matrix outside nucleus	Mitochondrion: organelle that carries out cellular respiration, and the production of the production o	packages, and secretes modified proteins	cytop	plasm, and regulates entrance exit of molecules		
that contains organelles	producing ATP molecules ' Golgi apparatus: processes, packages,	Cytoplasm: semifluid matrix outside —/ nucleus that contains organelles	Cell wall*: outer su supports, and prote			
"not commonly found in plant cells	and secretes modified proteins		*not found in animal	l calle		

*not commonly found in plant cells

Golgi apparatus: processes, packages, and secretes modified proteins

*not found in animal cells