Class Notes		
<u>Cell Organelles</u> Questions/Main Idea:	Name:	
	Period: Date:	
	Notes:	
What is an organelle?	 Specialized subunits of cells that have a particular function Prokaryotes have a few (e.g., ribosomes) 	
	 Eukaryotes have many, usually surrounded by a membrane This where we get the term "membrane-bound organelles" 	
What is the function of the ell membrane?	 Also called plasma membrane Protects and supports the cell Controls what enters and leaves the cell It is a lipid bilayer (2 layers of fat cells) Found in all types of cells – prokaryotes and eukaryotes! 	
What is the function of the cell wall (plants)?	 Found in eukaryotic plant and protist cells; also in prokaryotes Main function is protection, rigidity, and support Outside of cell membrane Made of cellulose (a carb!) Allows water and dissolved substances to pass through 	
What is the function of the nucleus?	 Controls most activities in the cell Usually one per cell Contains DNA – the coded instructions for making proteins and other molecules for the cell The nuclear envelope has nuclear pores, where things can enter or leave 	
What is the function of the nucleolus?	 Small, dense region in the middle of the nucleus This is where ribosomes are formed 	
What is the function of the cytoplasm?	 Clear fluid within cell that contains all organelles Moves materials throughout the cell 	
What is the function of the ribosomes?	 Makes proteins in the cell May be free in cytoplasm or attached to ER Proteins are <u>vital</u> to life – all cells must produce them!!! 	
What is the function of the Golgi apparatus (body)?	 Stacks of membranes used for storing, modifying, or packaging chemicals Packaged chemicals can be stored inside the cell or secreted outside the cell Cells that make saliva or mucus have many Golgi bodies 	
What is the function of the endoplasmic reticulum (ER)?	 Series of folded membranes that form sacs or tubes Two types – smooth and rough 	
What is the difference between the rough and smooth endoplasmic reticulum?	 Rough ER: Ribosomes make it look rough or bumpy Ribosomes synthesize (make) proteins, so the Rough ER is where this happens! Smooth ER: 	
	 Smooth - no ribosomes! Synthesizes (makes) lipids Detoxifies drugs 	

lysosomes? • Full of digestive enzymes to digest unwanted particles • Help white blood cells to destroy bacteria • Clean-up crew! What is the function of peroxisomes? • Filled with enzymes to digest toxic substances • Numerous in the liver • Do not form at Golgi Body What is the function of vacuoles? • In plant cells, they are very large! What is the function of chloroplasts? • Found in eukaryotic plant cells & some protist cells Convert chemical energy and convert it into chemical energy during photosynthesis • Pound in eukaryotic plant cells What is the function of the mitochondria? • Energy producers – the "powerhouse" of the cell! • Convert chemical energy into useable energy • Found in animal and plant cells What is the function of the cytoskeleton? • Overlapping network of filaments and fibers that support the cell and help it maintain its shape • Can also help cells move • Microfilaments and microtubules What is the function of centrioles? • Help to organize the cell during cell division • They migrate to either side of the cell and help to pull it apart • Only found in animal cells! What is the function of cilla and pili? • Extension of the cytoskeleton- Allows movement, main source of transportation for cells • Only some animals and some prokaryotes have these • Only some animals and	What is the function of	Made by the Golgi Apparatus
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