

# **Plant and Animal Cell Organelle Key**

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**Life Science (Lower Middle)**  
**Unit 1**

**Plant and Animal Cell Organelle Key**

<b>Organelle</b>	<b>Plant or Animal Cells</b>	<b>Job or Function</b>
<b>Cell Wall</b>	Plants	Gives shape and acts as a protective barrier.
<b>Chloroplast</b>	Plants	Creates glucose (sugar) using the energy from the sun, carbon dioxide, and water.
<b>Nucleus</b>	Both	Contains and protects the cell's DNA.
<b>Ribosomes</b>	Both	Builds proteins by connecting long chains of amino acids based on a message RNA (mRNA) copied from the cell's DNA.
<b>Mitochondria</b>	Both	Turns glucose (sugar) into energy (ATP), which is used in almost every reaction in the cell.
<b>Cell Membrane</b>	Both	Controls what enters or leaves the cell.
<b>Cytoplasm (Cytosol)</b>	Both	A liquid containing many proteins and ions that fills the space of the cell.
<b>Vacuole</b>	Both	A storage sac that can be filled with anything the cell might want to keep separate (food, water, waste, etc.).
<b>Golgi Body</b>	Both	Receives, modifies, sorts, and sends products from the ER to their final destination in the cell.
<b>Lysosomes</b>	Both	Contains digestive liquid that can break down large molecules and old cell parts into recyclable parts to be later used to make something new.
<b>Rough Endoplasmic Reticulum (ER)</b>	Both	A folded membrane system with attached ribosomes. Once proteins are made, this organelle helps properly fold or modify them before going to the Golgi Body.
<b>Smooth Endoplasmic Reticulum (ER)</b>	Both	A folded membrane system that puts together lipids to make new membranes.
<b>Microtubules and Microfilaments</b>	Both	Long tubes and cord-like structures that give the cell structure inside and allow for cell movement.