

ANIMAL CELL ORGANELLES

Reference Chart & Identification Guide

[Animal Cell Illustration with Numbered Labels 1-8]

#	Organelle	Primary Function
1	Nucleus	Contains genetic material (DNA) and coordinates cell activities like growth and reproduction.
2	Mitochondria	The "powerhouse" of the cell; site of cellular respiration and ATP (energy) production.
3	Ribosomes	Small particles responsible for protein synthesis by translating genetic code.
4	Golgi Apparatus	Modifies, sorts, and packages proteins and lipids for secretion or delivery to organelles.
5	Endoplasmic Reticulum	Network of membranes involved in protein folding (Rough) and lipid synthesis (Smooth).
6	Lysosomes	Contains digestive enzymes to break down waste materials and cellular debris.
7	Cell Membrane	A semi-permeable barrier that regulates the passage of substances in and out of the cell.

#	Organelle	Primary Function
8	Cytoplasm	The jelly-like substance that fills the cell and surrounds the organelles.