

Organelles

Biology

Every organelle and what it does, in one table.

The eukaryotic cell's components.

Organelle	Function
Nucleus	Houses DNA; controls transcription
Nucleolus	Assembles ribosomes
Rough ER	Protein synthesis and folding
Smooth ER	Lipid synthesis; detoxification
Golgi apparatus	Modifies, sorts and packages proteins
Mitochondria	ATP production by respiration
Lysosome	Hydrolytic digestion of waste
Chloroplast	Photosynthesis — plants only
Vacuole	Storage and turgor — large in plants
Cytoskeleton	Shape, transport, division

The secretory pathway runs nucleus → rough ER → Golgi → vesicle → membrane. Tracing it is a standard exam question.