**Golgi**

Structure: Made of 5-8 sacs.

Function: Processes and packages proteins and lipids.

**Endoplasmic Reticulum (ER)**

Structure: Series of tubes and sacs.

Function: Transports proteins.

**Nucleus**

Structure: Contains genetic material DNA (chromosomes).

Function: Directs cells activities

**Mitochondria**

Structure: Rod shaped and found throughout the cell.

Function: Powerhouse of the cell, make energy (ATP) from sugar.

**Lysosome**

Structure: Vesicle built by Golgi bodies.

Function: Digest excess or worn out organelles, food, bacteria, or viruses.

**Vacuole**

Structure: Large in plant cells, small in animal cells.

Function: Storage and digestion.

**Cytoplasm**

Structure: Jelly-like material found inside the cell.

Function: Supports and protects cells oganelles.

**Ribosome**

Structure: Not bound by a membrane, each cell contains thousands. Can be found on the ER.

Function: Make proteins.

**Chloroplast**

Structure: Found in plant cells, contains chlorophyll.

Function: Photosynthesis, uses light to make sugar for plants.

**Cell Wall**

Structure: Found in plant and bacteria cells.

Function: Supports and protects cells.

**Cell Membrane**

Structure: Located on the outside of the cell, made of a phospholipid bilayer.

Function: Controls what goes in/out of the cell.

**Prokaryote**

Structure: Has a cell wall and cell membrane, genetic material (DNA) is NOT in a nucleus.

Function: These are unicellular simple organisms, such as bacteria.

**Eukaryote**

Structure: Plants have a cell wall, animal cells do not. The genetic material (DNA) is in a nucleus. Have many organelles.

Function: These are mostly, complex organisms, such as plants and animals (with the exception of the protists).

**Prokaryotic**

Structure: Has a cell wall and cell membrane, genetic material (DNA) is NOT in a nucleus.

Function: These are unicellular simple organisms, such as bacteria.

**Cell**

The basic unit of structure and function in living things.

**Cell Theory**

A widely accepted explanation of the relationship between cells and living things.

Structure: Vesicle built by Golgi bodies.

Function: Digest excess or worn out organelles, food, bacteria, or viruses.

Structure: Large in plant cells, small in animal cells.

Function: Storage and digestion.

Structure: Jelly-like material found inside the cell.

Function: Supports and protects cells oganelles.

Structure: Not bound by a membrane, each cell contains thousands. Can be found on the ER.

Function: Make proteins.

Structure: Made of 5-8 sacs.

Function: Processes and packages proteins and lipids.

Structure: Series of tubes and sacs.

Function: Transports proteins.

Structure: Contains genetic material DNA (chromosomes).

Function: Directs cells activities

Structure: Rod shaped and found throughout the cell.

Function: Powerhouse of the cell, make energy (ATP) from sugar.

Structure: Plants have a cell wall, animal cells do not. The genetic material (DNA) is in a nucleus. Have many organelles.

Function: These are mostly, complex organisms, such as plants and animals (with the exception of the protists).

Structure: Has a cell wall and cell membrane, genetic material (DNA) is NOT in a nucleus.

Function: These are unicellular simple organisms, such as bacteria.

The basic unit of structure and function in living things.

A widely accepted explanation of the relationship between cells and living things.

Structure: Found in plant cells, contains chlorophyll.

Function: Photosynthesis, uses light to make sugar for plants.

Structure: Found in plant and bacteria cells.

Function: Supports and protects cells.

Structure: Located on the outside of the cell, made of a phospholipid bilayer.

Function: Controls what goes in/out of the cell.

Structure: Has a cell wall and cell membrane, genetic material (DNA) is NOT in a nucleus.

Function: These are unicellular simple organisms, such as bacteria.

**Active Transport**

The movement of molecules through a cell membrane in the opposite direction of natural movement. Needs cellular energy (ATP)

 E.g. Transport proteins, endocytosis and exocytosis.

**Passive Transport**

The movement of materials through a cell membrane without using cellular energy.

E.g. Diffusion and osmosis

**Chlorophyll**

A green pigment found in the chloroplasts of plants, algae, and some bacteria.

**Bacteria**

Single-celled organisms that lack a nucleus, prokaryote.

**Homeostasis**

The maintenance of stable internal conditions in an organism.

**Enzyme**

A chemical that speeds up chemical reactions in a living thing.

**Photosynthesis**

The process in which some organisms use water along with sunlight and carbon dioxide to make their own food.

**Respiration**

The process by which cells break down simple food molecules to release the energy they contain.

The maintenance of stable internal conditions in an organism.

A chemical that speeds up chemical reactions in a living thing.

The process in which some organisms use water along with sunlight and carbon dioxide to make their own food.

The process by which cells break down simple food molecules to release the energy they contain.

The movement of molecules through a cell membrane in the opposite direction of natural movement. Needs cellular energy (ATP)

 E.g. Transport proteins, endocytosis and exocytosis.

The movement of materials through a cell membrane without using cellular energy.

E.g. Diffusion and osmosis

A green pigment found in the chloroplasts of plants, algae, and some bacteria.

Single-celled organisms that lack a nucleus, prokaryote.