Nucleus

Cell membrane

Mitochondrion

Ribosome

Chloroplast

Cell wall

Cytoplasm

Vacuole

Controls what enters and leaves the cell.

Contains most of a eukaryotic cell's DNA.

Builds proteins from amino acids.

Produces most ATP during aerobic respiration.

Supports and protects the cell outside its membrane.

Carries out photosynthesis in plant and algal cells.

Stores water and other materials.

Cytosol and cell structures outside the nucleus.