

Eukaryotes	Prokaryotes
Found in Plants and Animals	Found in Bacteria and Unicellular Organisms
Has a Nucleus	Doesn't have a Nucleus
Bigger than the Eukaryotes	Smaller than the Prokaryotes
One of the main cell groups (out of 2)	The other one of the main cell groups
Came after Eukaryotes	Came before Prokaryotes (2 billion years)
Were created from Eukaryotes	Created Prokaryotes

Cytoplasm

Structure) Space between the nucleus and the cell membrane.

Function) Make sure all of the organelles do their job

Location) Space between cell membrane and nucleus

How it relates to another part) In that space is a substance that has the same consistency as hair gel. Liquid is called Protoplasm. 99% is water. There's a lot of stuff dissolved in it that make it thick

Cytoskeleton

Structure) Skeleton for the cell. It's internal. Made up of super tiny thread like material called microfilaments and microtubules.

Function) Provides internal support for the cell.

Location) Inside the cell

How it relates to another part)

Organelles (Tiny Organs)

Structure) Different organelles

Function) Has it's different jobs

Location) all over the cell

How it relates to another part) Cell can't live without organelles like we can't live without a heart or a liver

Mitochondria

Structure) Two membranes, outer membrane which acts like the skin and the inner membrane that takes in nutrients (mainly the sugar) and puts it through a process to create energy

Function) Creates energy for the cell and for us. Needs sugar and oxygen to create energy.

Location) In Eukaryotic cells

How it relates to another part) Everything needs energy except for diffusion

Vacuole