

The cytoplasm is the liquid environment of the cell. It is made mostly of water.



The **cell membrane** covers the surface of the cell and helps to give the cell its shape. It also controls what enters and exits the cell.

## The genetic material:



The **nucleus** is the storage center of the DNA. The nucleus is separted from the rest of the cell by a nuclear membrane.



Deoxyribonucleic acid (DNA) contains the instructions cells follow to carry out life functions.

## What do the organelles and other structures do?



The mighty **mitochondria** produce energy for the cell.



**Ribosomes** make proteins. There are millions of ribosomes in an average human cell.



Golgi bodies package proteins that are sent out of the cell.



Rough endoplasmic reticulum (ER) is a pathway for molecules that travel through the cell. It is called rough because there are many ribosomes on its surface.



Smooth endoplasmic reticulum (ER) is also a pathway in the cell. It is called smooth because there are no ribosomes on its surface.



Microtubules help to support the cell's structure.



Lysosomes are trash compactors of the cell. They store and break down materials from the cell.