

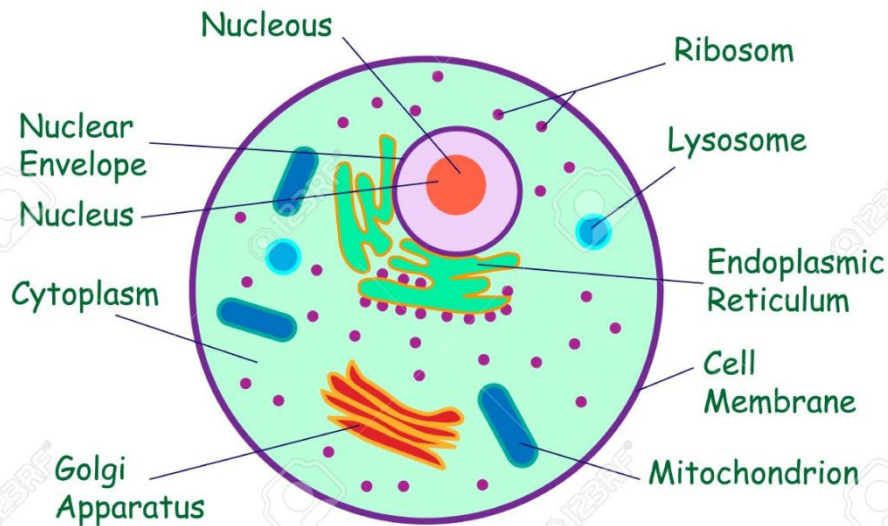
Cell organization

Structure of animal and plant cell

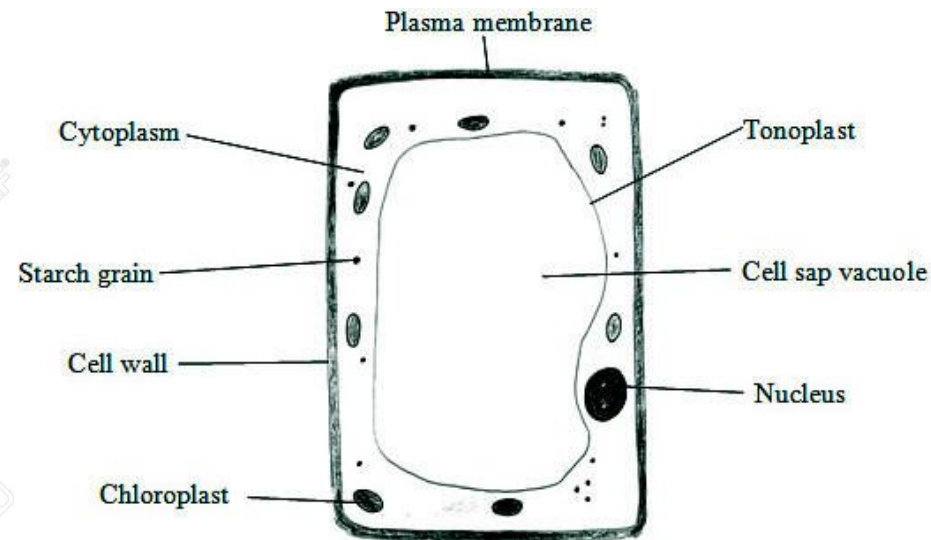
- Animal and plant cell are similar that they have same structures such as nucleus and cytoplasm. However, there are a few differences between them.
- *Cell structure* cannot be seen with the naked eye. We have to use the light microscope to magnify them. Structures in the cell can be seen under the light microscope.

ANIMAL CELL

Animal Cell



PLANT CELL

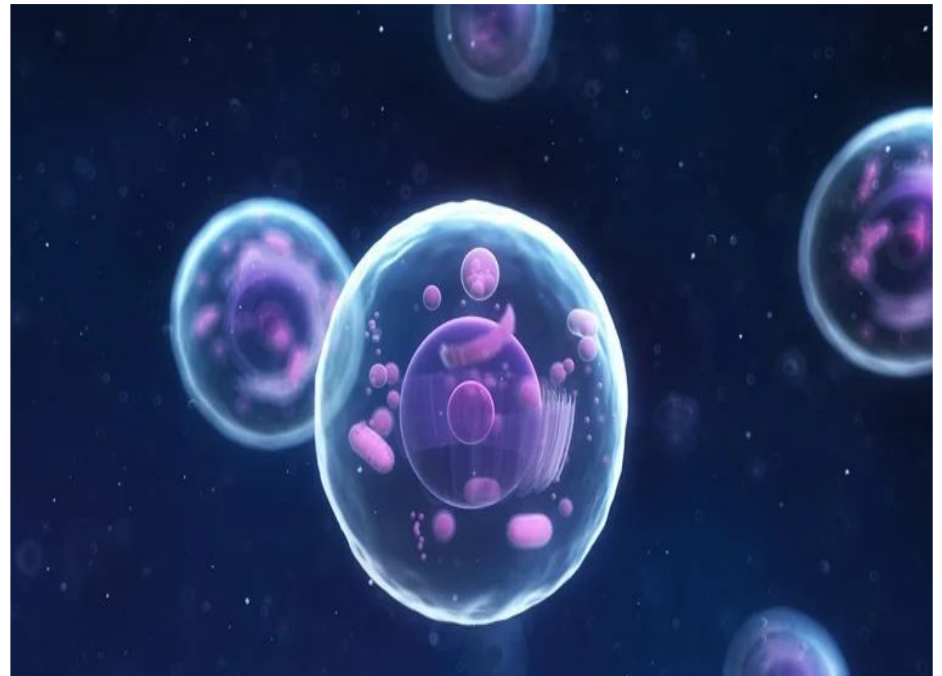


- **Light microscope** - an instrument that to allowed to see magnified objects or images

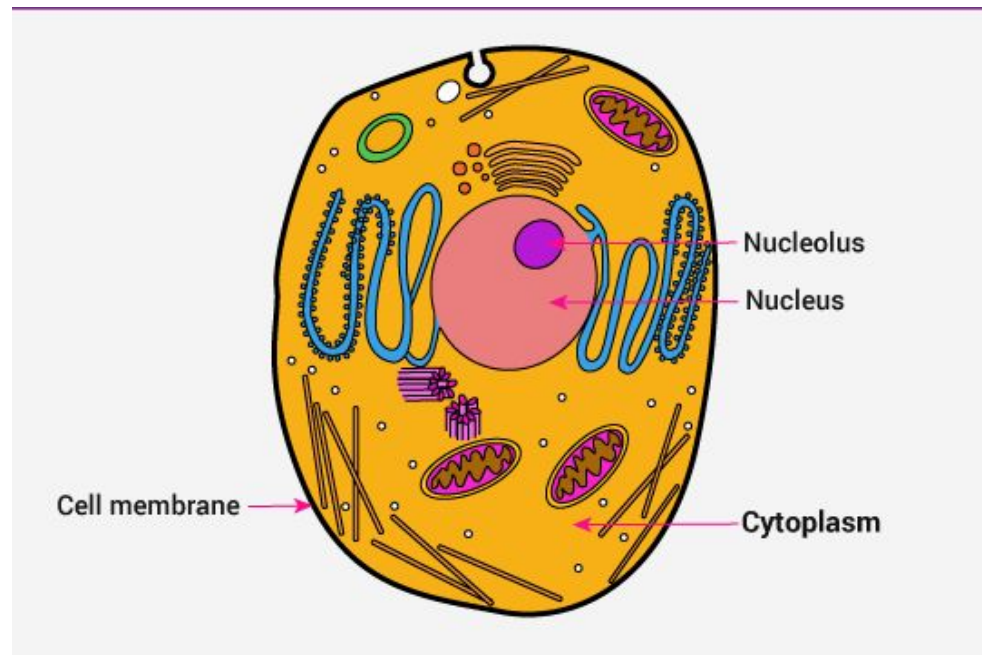


Abbildung ähnlich

- **Nucleus**-the central part of most cells that contain genetic material and is enclosed in a membrane



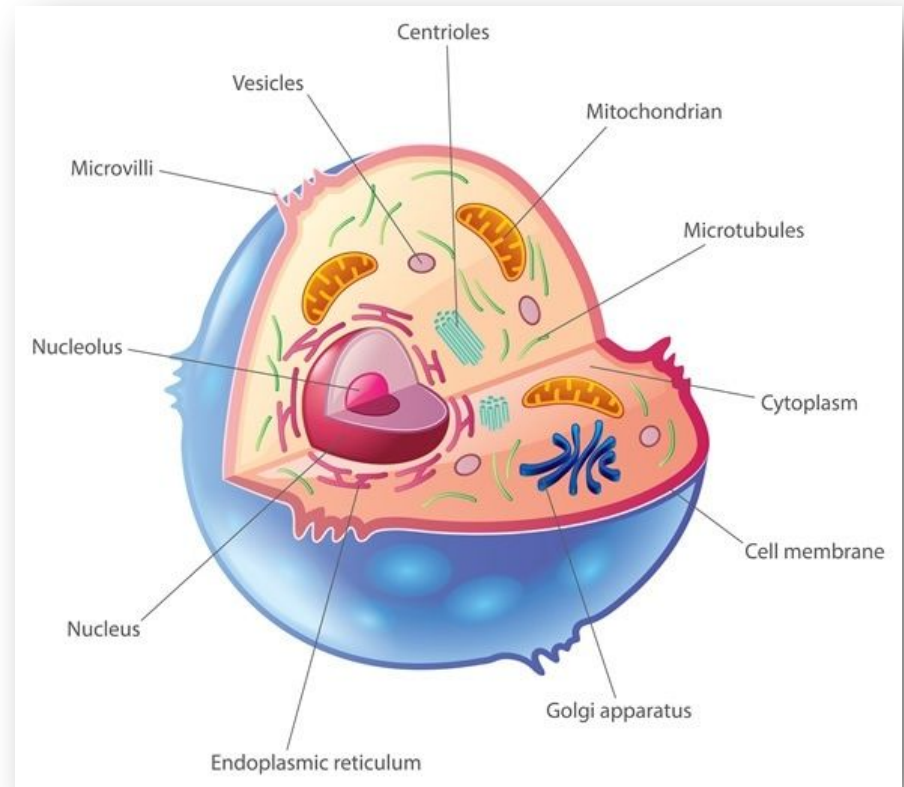
- **Cytoplasm**-the substance inside a cell that surrounds the cell's nucleus



- ❑ The **nucleus** is controlling all cell process. It contains **DNA**, which stores genetic information of plants and animals.
- ❑ **Cytoplasm** is a jelly-like structure inside of the cell. It surrounds and holds organelles.
- ❑ **Organelles** are little organs of the cell.
- ❑ They are doing different activities inside it. For example:
 - **Vacuole** stores water and minerals. Plants have one large vacuole, while it is absent in multicellular animals.
 - Only some **unicellular animals** have food and contractile vacuoles.
 - **Food vacuole** stores food while contractile vacuole remove excess water from the cell



• **Organelle**-the
part of the cell
which has its
own function



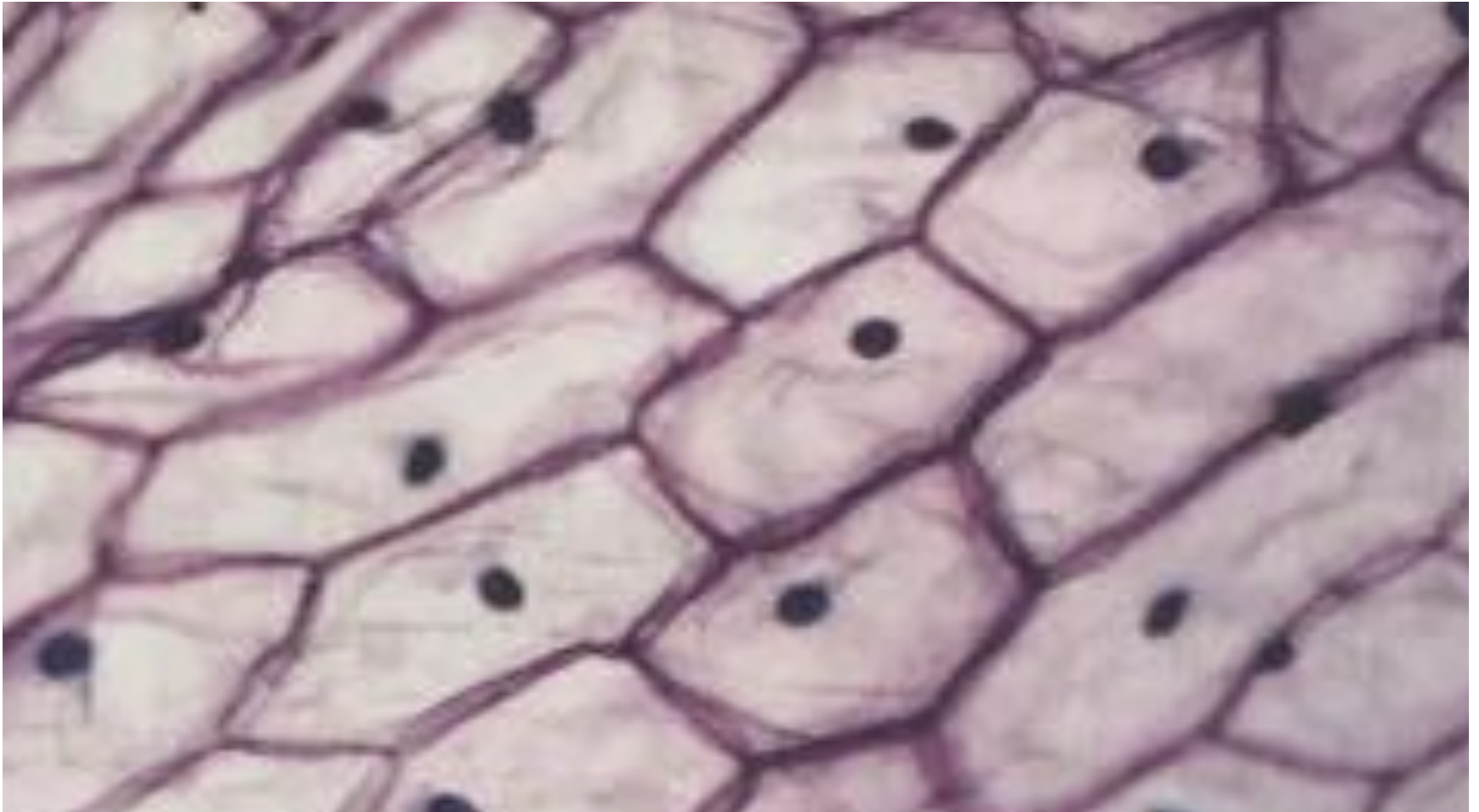
Another different between plants and animals are **PLASTIDS**

- i. Plastids are found only in plant cells.
- ii. Their function is to make food by using sunlight.
- iii. Plastids give color to the plants.

There are 3 main types of plastids:

- ❖ **Chloroplasts**-give to plants **green** color
- ❖ **Leucoplasts**-colorless, store starch
- ❖ **Chromoplasts**-give to plants **red, yellow, orange** colors.

Onion cells under the light microscope

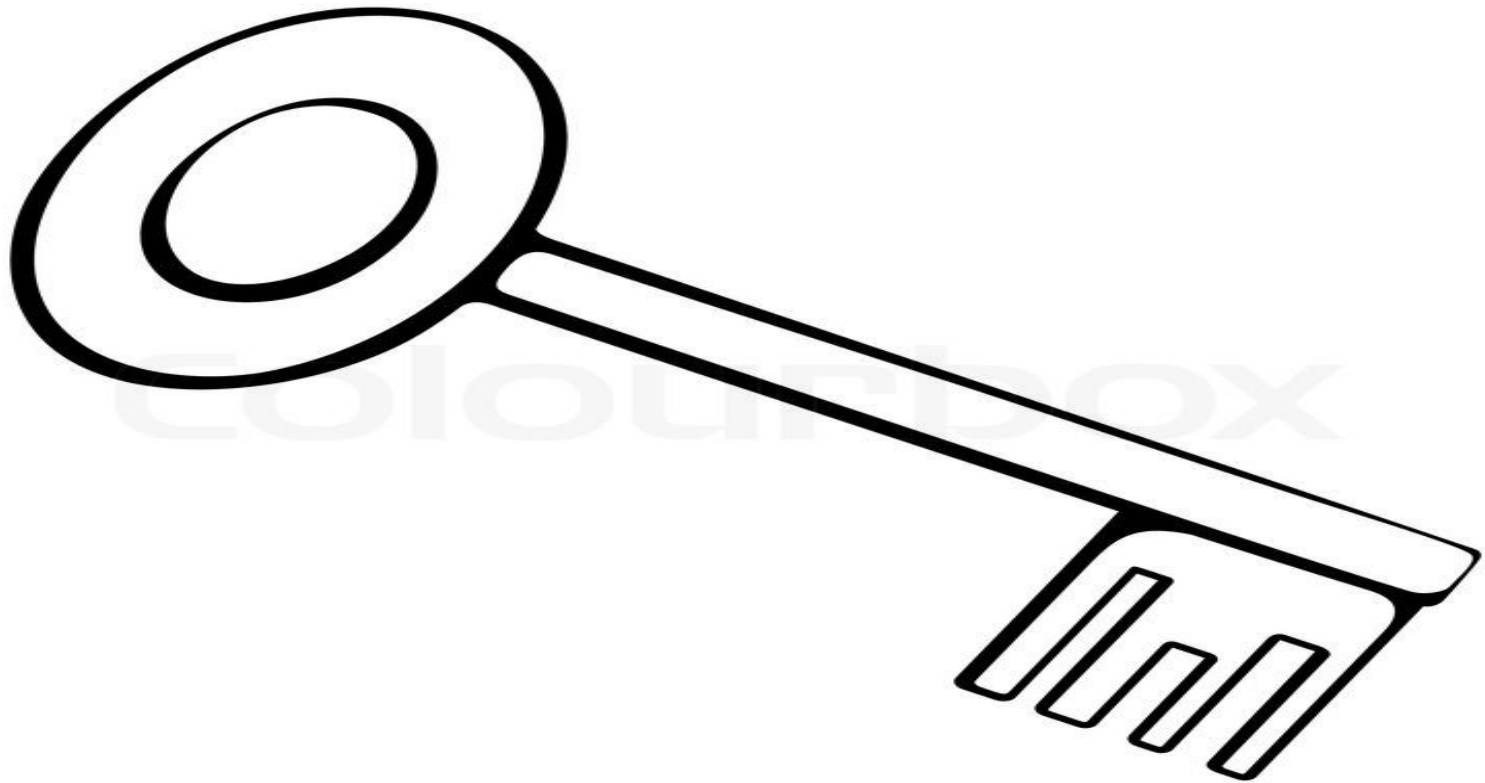


Activity

- Work individually to fill a table below. Which organelle is present in which type of the cell

Name of Organelle	Plant Cell	Animal Cell	Both
Cell Membrane			
Cell Wall			
Chloroplast			
Cytoplasm			
Vacuoles			

KEY TERMS



TERMINOLOGY

- | | |
|--|---|
| 1) Cell membrane -жасуша мембранасы,клеточная мембрана | 1) Light microscope -жарық ұлғайтқышы,световой микроскоп |
| 2) Cell wall -жасуша қабырасы,клеточная стенка | 2) Magnify -ұлғайту, увеличить |
| 3) Contractile vacuole -жиырылғыш вакуоль, сократительный вакуоль | 3) Rectangular -тікбұрышты, прямоугольный |
| 4) Enclosed -қоршалған, закрытый | 4) Rigid -қатты,тығыз, жесткий |
| 5) Flexible -иілгіш,гибкий | 5) Starch -крахмал |
| | 6) Store -сақтау,хранить |

Thank you for
your attention!