

Unit 1. The Cell. The cell theory. Classification of cells. The different organelles and its functions.

1. Choose the correct name for each scientific.



2. Link with arrows these scientific with their scientific contribution.

Robert Hooke	Animals and plants are formed by cells
Leeuwenhoek	All tissues are formed by cells
Robert Brown	Discovery of protozoa and spermatozoa
Schleiden and Schwann	The cells come from other cells
Rudolf Virchow	First description of cells
Santiago Ramon y Cajal	The nucleus of the cell

3. Watch this video and answer the following questions:

▶ Prokaryotic vs Eukaryotic: The Differences | Cells | Biology | FuseSchool

- _____ and _____ are prokaryotes. Whereas _____, _____ and _____ are eukaryotes.
- In prokaryotes, we call a nucleus without nuclear membrane a '_____', It is simply the area in which _____ exists.
- _____ are the only organelles found in prokaryotic cells.
- Eukariotes can meet their nutritional needs to grow _____ and multiply _____.
- All prokaryotes are _____ but eucariotes can be either _____ or _____.

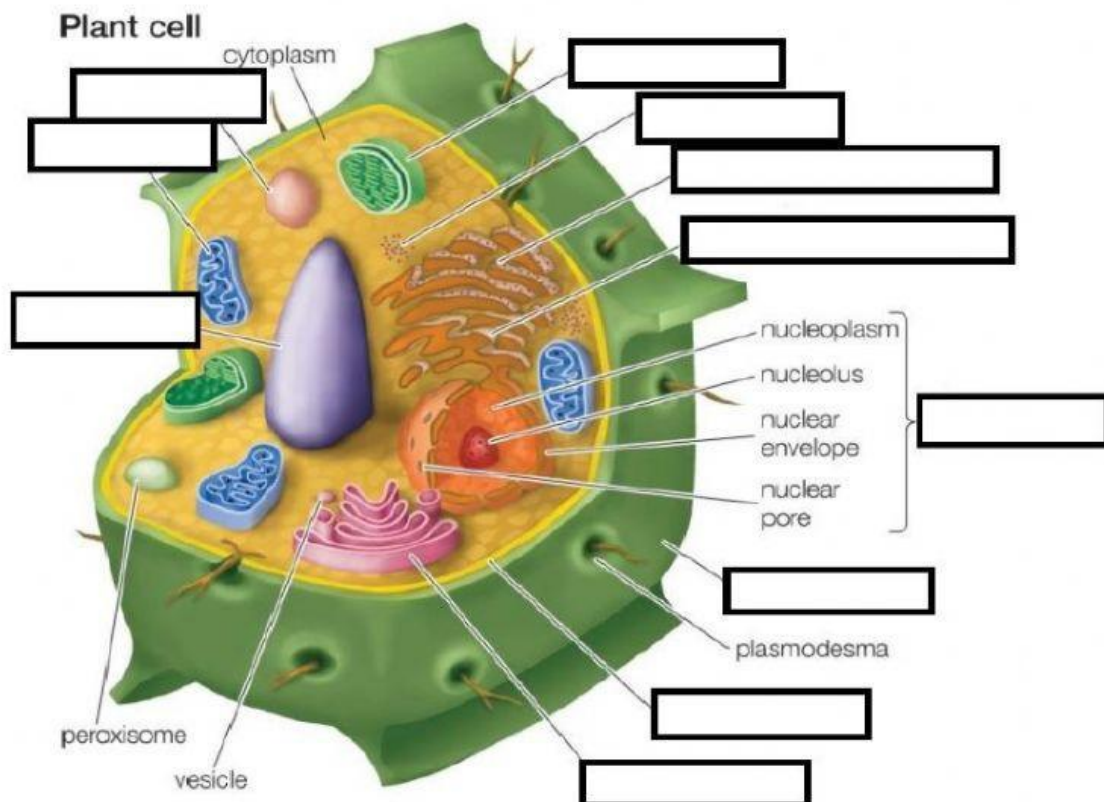
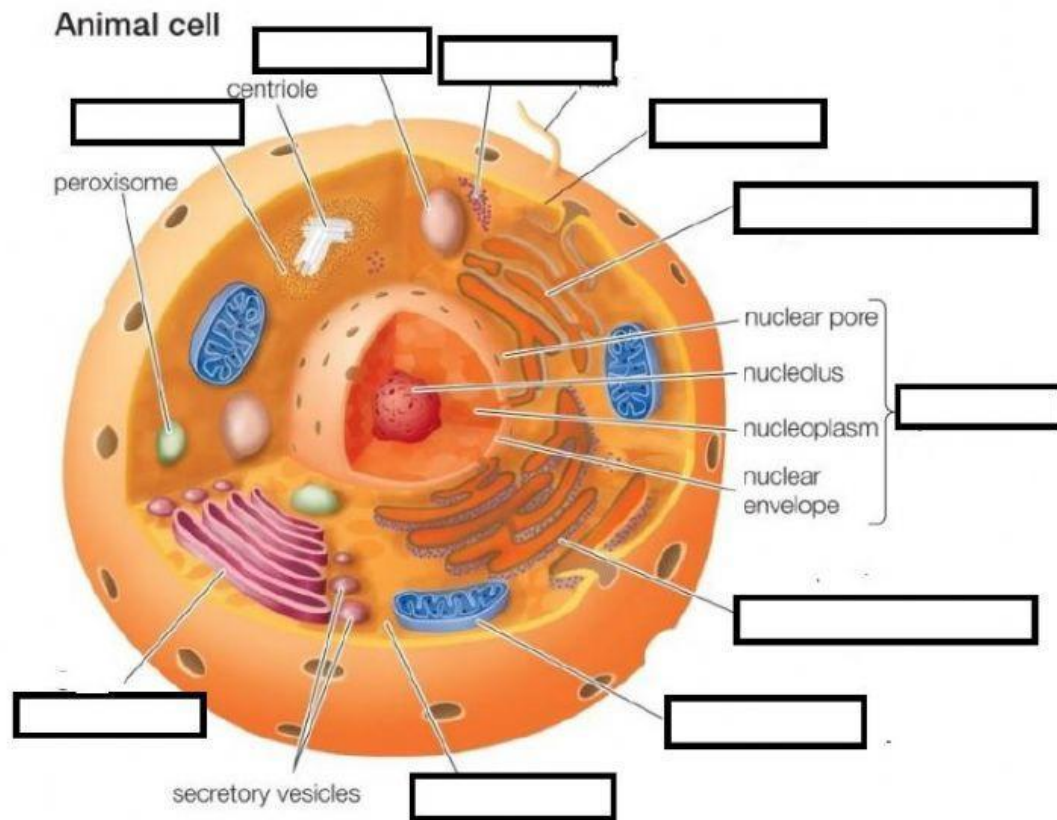
4. Select the correct sentence for each column heading in the table below.

Cell theory	Cell characteristics	Prokaryota vs Eukaryota
Cells have a cell membrane responsible for regulate the entry and exit of substances	All cells contain genetic information into the DNA	Eukaryotic cells have the genetic material (DNA) protected by a double membrane
All living things are made of cells	Prokaryotic cells are the smallest and simplest cells	All living things are made of cells
All cells have ribosomes	Cells have a cell membrane responsible for regulate the entry and exit of substances	All cells contain genetic information into the DNA
All cells come from previous cells	Cells are the anatomical and physiological units of living things	Cells have a cell membrane responsible for regulate the entry and exit of substances
Prokaryotic cells are the smallest and simplest cells	Eukaryotic cells have the genetic material (DNA) protected by a double membrane	All cells come from previous cells
Cells are the anatomical and physiological units of living things	All cells have ribosomes	Prokaryotic cells are the smallest and simplest cells

5. Link the following sentences with one of the three vital funtions of cells.

- Metabolism are the chemical processes that take part in the cells _____.
- Cells have got mechanisms to capture stimuli and for responding to them _____.
- Cell division is the process in which one cell divides to form two new cells _____.
- Before the cell division, the cell duplicate this DNA _____.
- Cell can make their own materials _____.
- Cells can interact with other cells _____.

6. Complete the pictures with the names of the different organelles.



7. Link with arrows these pictures with their function:



Synthesizes and stores proteins



Processes protein made in the endoplasmic reticulum



Perform the digestion of subcellular particles



Synthesises lipids and destroys toxic substances



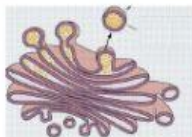
Store different types of substances



Organize cytoskeleton, direct movement of cilia or flagella and collaborate in cell division



Convert light energy into chemical energy in a process called photosynthesis



Make proteins using genetic information



Obtain the energy stored in nutrients into the process called cell respiration

8. Search information in "Google images" to choose the correct name of the following micrographs of different organelles.

