



Cells Test



1. The cell is the basic unit of all known living organisms. They come in all shapes and sizes, but possess many common components. These are called organelles. Use the words in the box to fill in the gaps and to identify the organelles and their functions.

The contains all the genetic information for the cell and controls all the cell's functions.

The is where most chemical processes take place. These are controlled by enzymes.

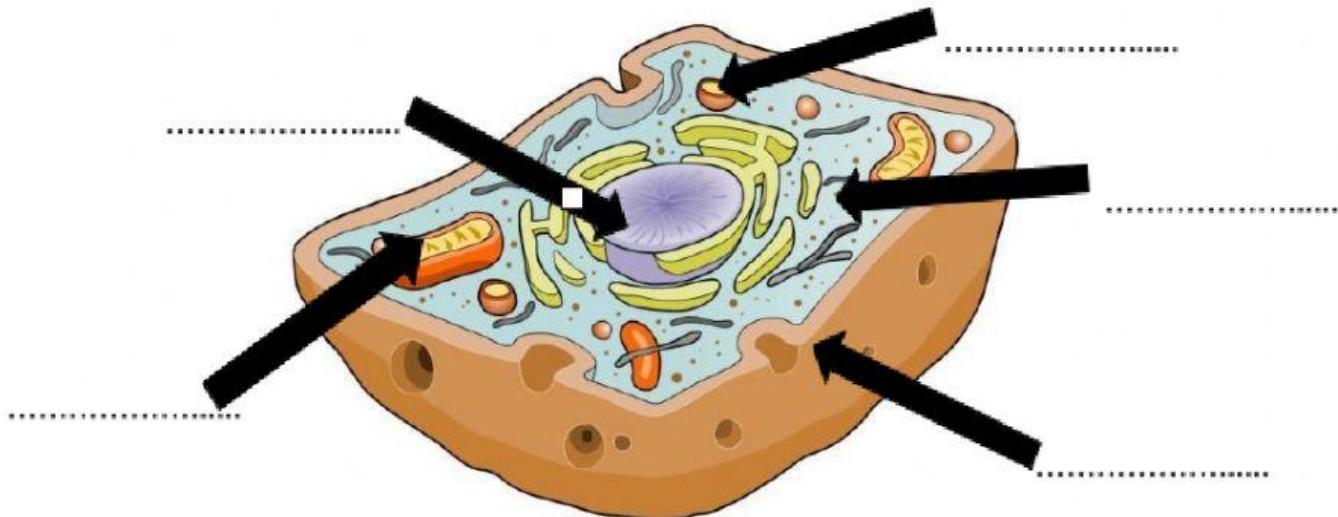
The forms the outside of the cell and acts as a barrier, controlling the transfer of materials into and out of the cell.

Protein synthesis takes place in the

..... are located in the cell's cytoplasm. They provide energy for the cell by carrying out cellular respiration.

nucleus	cell membrane	mitochondria	cytoplasm	ribosomes
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2. Label this diagram of an animal cell using the above terms.

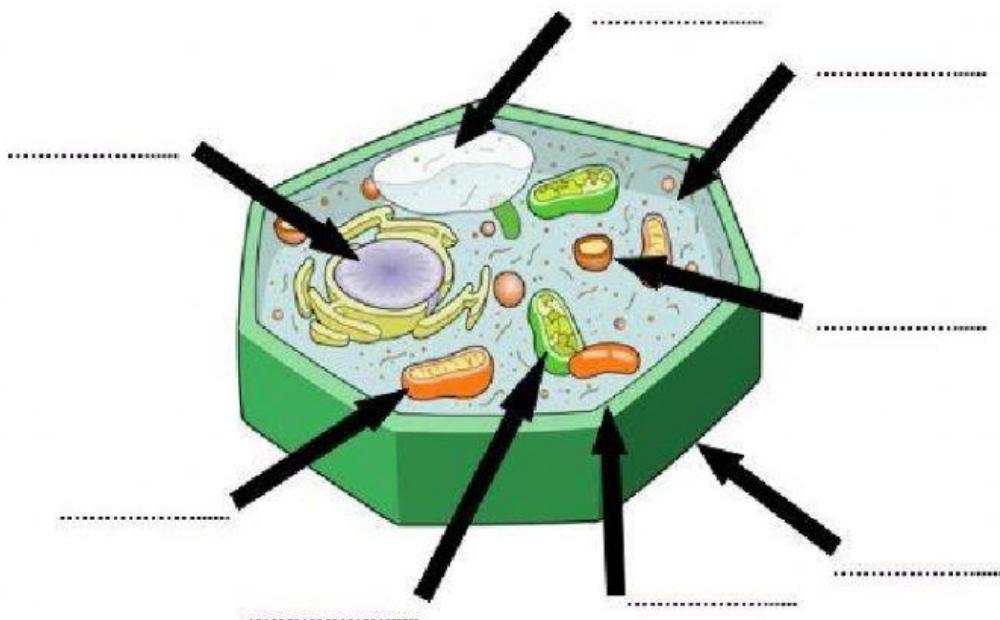


3. Plant cells also possess these organelles but they also have three extra cell structures. Can you think what these are? Fill in the table with your answers.

Feature	Function
1.	They contain the green pigment chlorophyll that is needed for photosynthesis.
2.	It stores extra water and sap to help keep the cell turgid and give it extra support.
3.	This is rigid and made of cellulose and gives the cell shape and strength.

4. Label this diagram of a plant cell, identifying the above three organelles as well as those common to both plant and animal cells. Use the words below the assist you in spelling. (8 marks)

Cell wall Cell membrane Cytoplasm Chloroplast Nucleus
Mitochondrion Large vacuole Ribosome



5. What does unicellular mean? Give an example of a unicellular organism. (4 mks)

Meaning

Example.....

6. What does multicellular mean? Give one example of a multicellular organism.

Meaning.....

Example.....

7. The cells in many multicellular organisms are specialized to perform specific functions. Write down the function of each of these specialized cells and two ways you think they are adapted to their functions: (9 marks)



a) Red blood cell:

Function:

Adaptation 1.....

Adaptation 2.....



b) Sperm cell:

Function:

Adaptation 1.....

Adaptation 2.....



c) Nerve cell:

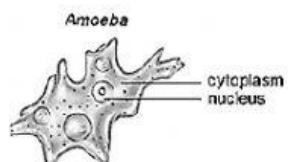
Function:

Adaptation 1.....

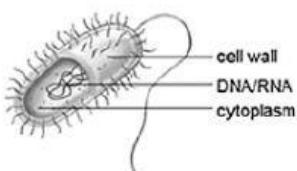
Adaptation 2.....

8. For the organisms below, write VIRUS, BACTERIUM, PROTIST or FUNGUS.
[1 mark each]

1



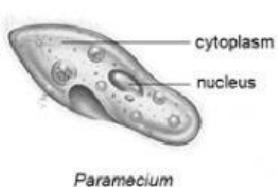
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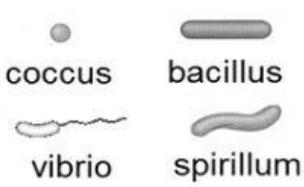
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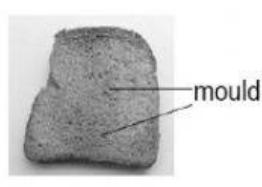
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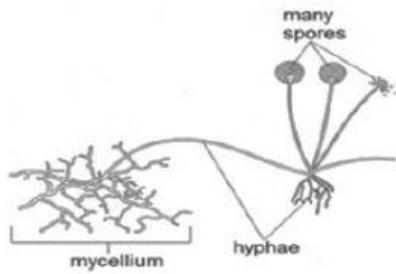
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6



7



8

