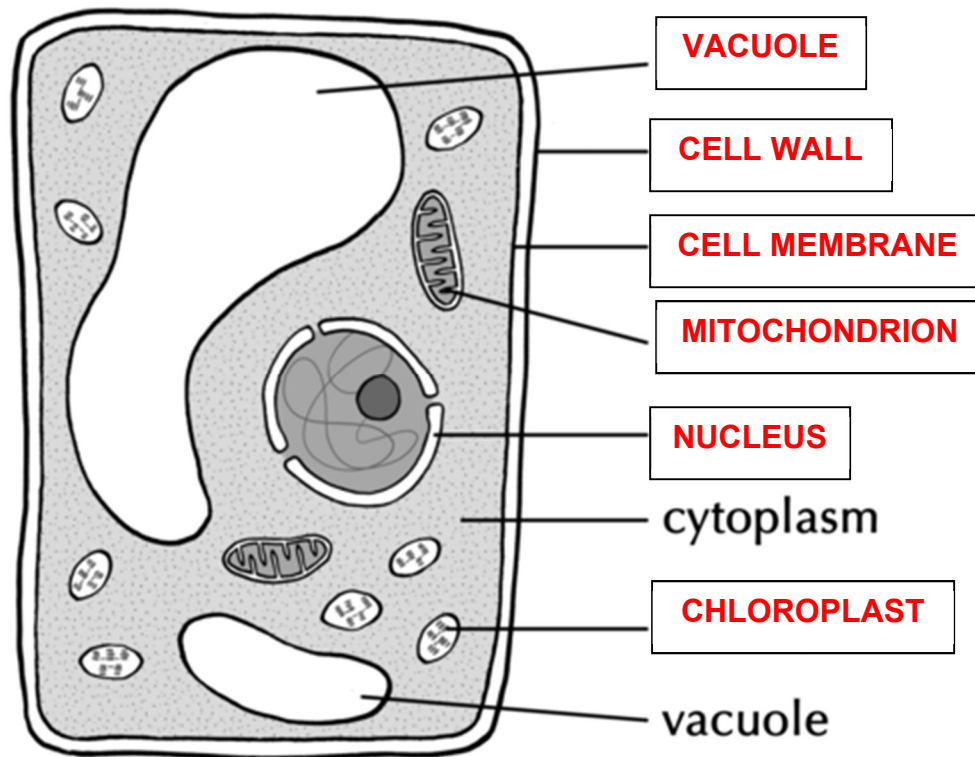


**Grade 9**  
**Natural Science**  
**Revision Worksheet 3**  
**June 2020**

**Question 1**

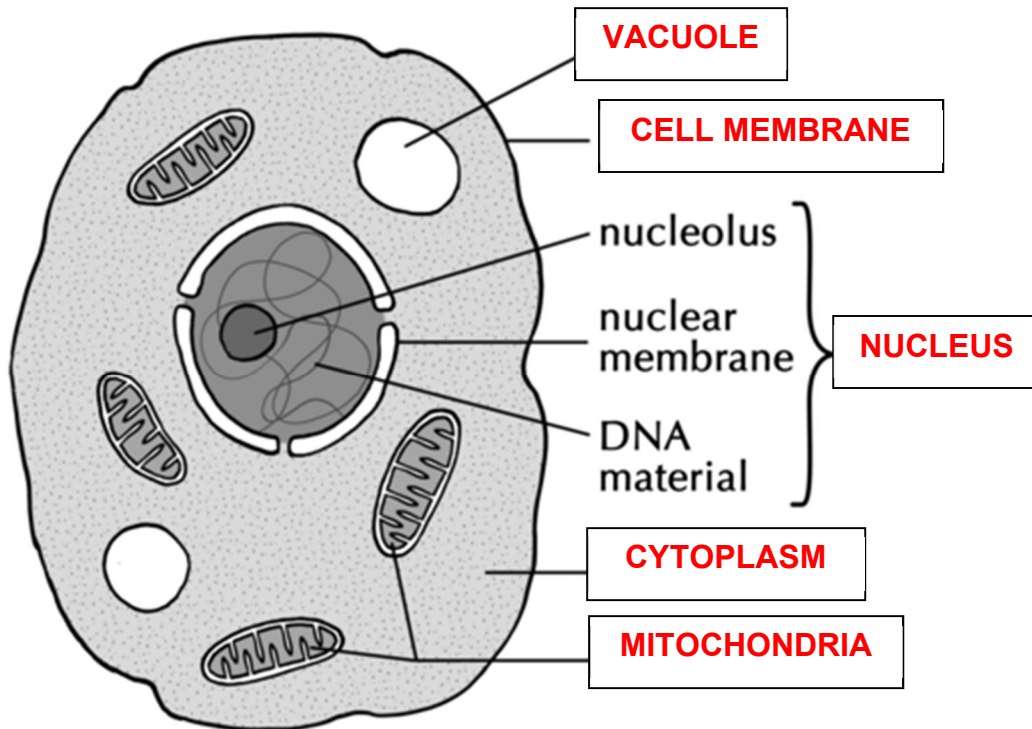
Study the diagram, and then answer the questions that follow in your workbooks.



1. Provide a suitable heading for the above diagram
  - a. **A BIOLOGICAL DIAGRAM OF A PLANT CELL**
2. Provide labels for A – F
3. Provide the functions for the parts labelled A, B, D, F
  - a. **A: Contributes to the shape of the cell. It also stores nutrients, water and waste products.**
  - b. **B: Gives the cell its shape and provides protection to the cell.**
  - c. **D: Responsible for respiration in the cell, the release of energy.**
  - d. **F: Contains chlorophyll which allows plant to photosynthesise.**
  - e.

## Question 2

Study the diagram, and then answer the questions that follow in your workbooks.



1. Provide a suitable heading for the above diagram.
  - a. **A BIOLOGICAL DIAGRAM OF AN ANIMAL CELL**
2. Provide labels for A – E.
3. Provide the function of the parts labelled B, C and D.
  - a. **B: Surrounds the cell. Allows certain substances to move in and out.**
  - b. **C: Controls the life functions and processes of the cell. Also carries the hereditary genetic material.**
  - c. **D: Provides a medium in which chemical processes can occur.**

### Question 3

1. Draw a table of the **differences** between a plant and an animal cell

A TABLE SHOWING THE DIFFERENCES BETWEEN A PLANT CELL AND AN ANIMAL CELL	
Plant cell	Animal cell
Has a cell wall	Does not have a cell wall
Fixed, firm shape	No fixed form
Large vacuole present	If the vacuole is present, it is small and temporary
Has chloroplasts	No chloroplasts

2. Draw a table of the **similarities** between a plant and an animal cell

A TABLE SHOWING THE SIMILARITIES BETWEEN A PLANT CELL AND AN ANIMAL CELL	
Plant cell	Animal cell
Has a cell membrane	Has a cell membrane
Has cytoplasm	Has cytoplasm
Has a nucleus	Has a nucleus
Has mitochondria	Has mitochondria

3. Would an animal cell contain chloroplasts?

- a. **NO.**

4. Explain your answer to the above question.

- a. **An animal is a heterotroph. Therefore not able to create its own food, and is dependent on other sources of nutrition. On the other hand, plants are autotrophs, and can therefore create its own food. A chloroplast is an organelle that makes it possible for the organism to create its own food. An animal cell would not have chloroplasts, because it does not create its own food.**

#### Question 4

The following descriptions are describing certain parts of the cell. Identify which part is being described.

1. This part carries the genetic and hereditary information of each cell.
  - a. **Nucleus**
2. This part allows certain substances to move in and out, and it is thin and pliable.
  - a. **Cell Membrane**
3. This part is responsible for respiration.
  - a. **Mitochondrion**
4. This part acts as a medium for chemical reactions to happen in.
  - a. **Cytoplasm**
5. This part stores nutrients, water and waste products.
  - a. **Vacuole**
6. This part contains chlorophyll.
  - a. **Chloroplast**
7. This part gives support and provides structure.
  - a. **Cell wall**