

# Unit of Living (English Medium)

## Exercise 56:

### Solution 1(a):

The following picture indicates the organization of living and non-living things.

For building a house, the essential component is the brick, without which the construction is impossible. The bricks join to form a wall, a wall is partitioned to form small rooms and finally, a whole building.

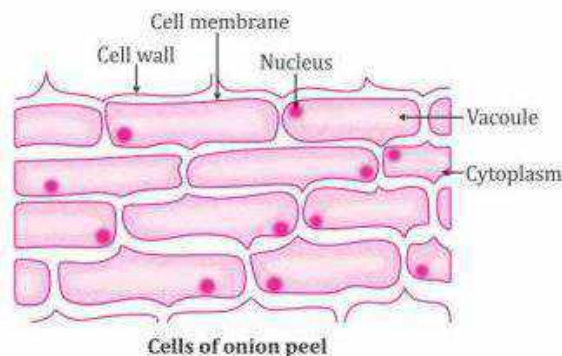
Likewise, the structural and functional constituent of our body is cell. Many cells form tissues, tissues form organs, organs form organ system that give rise to a whole body.

## Exercise 57:

### Solution 1(a):

#### Observations

1. The rectangular cells of onion epidermis are seen which is called cell wall.
2. A deeply coloured, round body is seen known as nucleus.
3. A thin layer of less deeply coloured substance along the inner surface of cell wall is seen, called cytoplasm.

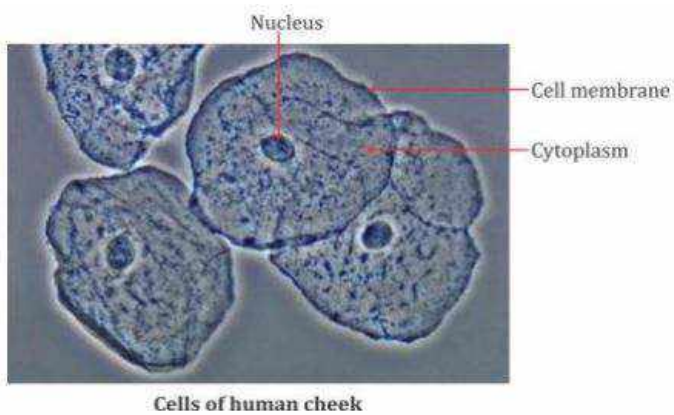


## Exercise 59:

### Solution 1(a):

#### Observations

1. The cheek cell is found inside of the mouth, on the cheek.
2. It consists of a nucleus, cell membrane and cytoplasm.



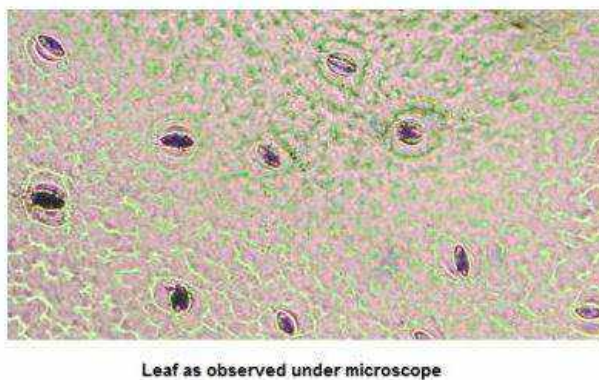
#### Exercise 61:

### Solution 1(a):

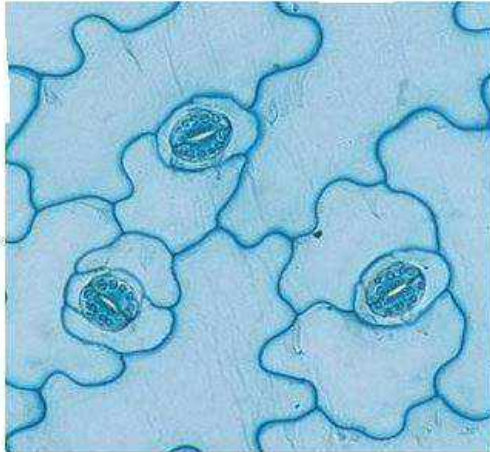
| No. | Structure   | Plant Cell           | Animal Cell           |
|-----|-------------|----------------------|-----------------------|
| 1   | Cell Wall   | Present              | Absent                |
| 2   | Shape       | Rectangular          | Oval                  |
| 3   | Vacuole     | One large vacuole    | More than one vacuole |
| 4   | Chloroplast | Present              | Absent                |
| 5   | Lysosome    | Not evident          | Present in cytoplasm  |
| 6   | Centrioles  | Absent               | Present               |
| 7   | Plastids    | Present in cytoplasm | Absent                |

#### Exercise 64:

### Solution L.1:

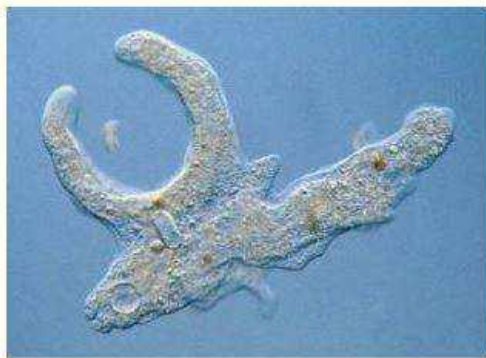


### **Solution L.2:**



**Twig observed under microscope**

### **Solution L.3:**



**Amoeba-pseudopodia**

The above diagram is of a unicellular animal called amoeba.

### **Solution 1:**

Cell is the structural and functional unit of life of all living organisms which provides structure for the body and carries out specialized functions.

### **Solution 2:**

Cells are small compartments that hold the biological equipment necessary to keep an organism alive and successful. There are smaller pieces that make up cells such as macromolecules and organelles. The various cell organelles are cell membrane, endoplasmic reticulum, ribosome, Golgi body, lysosome, mitochondria, centriole, chloroplast and cell wall.