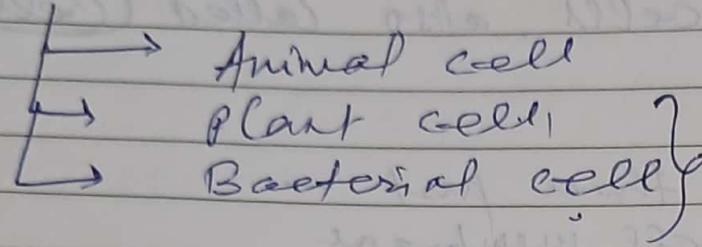


- cells are smallest unit of life. that can replicate independently
- cells are the basic unit of organisms



→ 1665 → English Scientist Robert Hooke discovered cells while looking thin slice of cork.

⇒ He described the cells as tiny boxes or a honey comb.

⇒ He thought that the cells only existed in plant & fungi.



- Antonie van Leeuwenhoek was 1st observed bacteria & protozoa.

- Schleiden (1838) a German botanist & Schwann (1839) a Zoologist

↓  
Sponsored a theory that all animal & plant organisms are composed of cells.

classmate

↓ used term cell theory

## Difference between plant & Animal Cell

### Plant cell

### Animal cell

- |   |   |   |
|---|---|---|
| → Usually larger than animal cell   | — | Smaller than plant cell                 |
| — cell wall present in addition to plasma membrane and consist of middle lamellae, primary & secondary wall | — | cell wall absent                        |
| — Plasmodesmata present   | — | Absent                                  |
| — chloroplast present   | — | Absent                                  |
| — vacuole larger & permanent  | — | small & temporary                       |
| → outside rigid cell wall made up of cellulose  | — | plasma membrane                         |
| — shape - definite due to rigid cell wall   | — | not so definite it can change its shape |