

INDIAN SCHOOL NIZWA
SCIENCE-WORKSHET 2
CH.5 FUNDAMENTAL UNIT OF LIFE

DATE: _____ NAME: _____ CLASS: IX

1. State the reason for calling cell membrane as selectively permeable membrane.
2. Name two cell organelles which have their own D.N.A and ribosomes.
3. List the constituents of plasma membrane.
4. State the significance of membrane biogenesis.
5. (a) Draw a neat diagram of an animal cell and label the following parts. (i) Nuclear envelope (ii) Mitochondria (b) State one function of Endoplasmic Reticulum.
6. Draw a neat diagram of a plant cell and label on it chloroplast, golgi apparatus, nucleus.
7. Give any three points of difference between prokaryotic and eukaryotic cells.
8. (a) Why is the cell called the structural and functional unit of life ?
(b) Name the factor which decides the movement of water across the plasma membrane.
(c) Name the organelle which has membrane bound sac filled with powerful digestive enzymes.
9. Write the functions of the following organelles in a cell. (i) Chloroplast (ii) nucleus (iii) Ribosomes.
10. State reason for the following : (a) Mitochondria are known as powerhouse of cell
(b) Plastids are able to make their own protein. (c) Plant cells shrink when kept in hypertonic solution.
11. Write two similarities and one dissimilarity between mitochondria and plastid.
12. List two types of plastids. State one function of each.
13. Division of labour exists even at intra cellular level. Justify the statement by giving two examples.
14. (a) List any two structural differences and two similarities between a plant cell and an animal cell. (b) What would happen if an animal cell is kept in distilled water for 24 hours ?
15. (a) Write two points of difference between nuclear region of a bacterial cell and nuclear region of an animal cell.
(b) Which structure present in the nuclear region of a living cell bear genes ?
16. Define a vacuole inside a cell and mention its importance?
17. What are the main postulates of the cell theory?