

DELHI PUBLIC SCHOOL, JAMMU

CYCLE TEST-1 ASSIGNMENT (2018-19)

CLASS: IX

SUBJECT : SCIENCE

PHYSICS

CHAPTER: 1.MOTION

2. FORCES AND LAWS OF MOTION

1. Define velocity. What is the S.I unit of velocity? How velocity is different from speed?
2. What do you understand by retarded motion?
3. The initial velocity of an object is 20m/s and it changes uniformly with time so that the object acquires a final velocity of 30m/s after a time gap of 10 seconds. Find the average velocity of the object.
4. An athlete completes one round of a circular track of diameter 200 m in 40 s. What will be the distance covered and the displacement at the end of 2 minutes and 20 seconds.
5. Draw a distance- time graph for uniform motion / non-uniform motion.
6. An automobile vehicle has a mass of 1500 kg. What must be the force between the vehicle and the road if the vehicle is to be stopped with a negative acceleration of 1.7m^{-2}
7. State the law of conservation of momentum.
8. A marble lying at rest is struck by another marble of same type at a speed of 5ms^{-1} . After collision if first marble comes to rest, calculate the speed of second marble.
9. A force of 20 n is applied on an object of mass 5 kg moving with a velocity of 8m/s for 10s. Find the final velocity of object.
10. A 35 kg boy, playing ladder and a slide, starts sliding from the top and covers a distance of 5m in 2 seconds. Find his acceleration. Also find the force acting on it.

CHEMISTRY

CHAPTER: 1. MATTER IN OUR SURROUNDINGS

2. IS MATTER AROUND US PURE

1. Discuss briefly the effect of temperature on the change of state of a solid into a liquid and that of a liquid into gas.
2. What is latent heat? What are its types? Describe by giving one example of each type.
3. With the help of an experiment show that diffusion becomes faster with increase in temperature?
4. Differentiate between: boiling and evaporation?
5. Explain the factors responsible for bringing a change in the physical state of a substance?
6. What is sublimation? Give two examples of substances which undergo sublimation?
7. Sponge is a solid and still we are able to compress it. Why?
8. Liquids and gases are fluids. In what way do they differ from each other?
9. What are mixtures? Discuss its properties.
10. Differentiate between homogeneous mixture and heterogeneous mixture.

BIOLOGY

CHAPTER: 1. THE FUNDAMENTAL UNIT OF LIFE

2. TISSUES

1. Mention any two characteristics of a prokaryotic cell.
2. What is the importance of vacuoles in a cell?
3. List the various organelles in a cell. Write one function of each.
4. What are the different kinds of plastids? Write their functions.
5. Mitochondria and chloroplast are two different cell organelles. Write two points of similarities and two points of dissimilarities between them.
6. Genes are the functional units of chromosomes. What is their significance?
7. What is the primary function of epidermis?
8. Describe the various elements of vascular tissues of plants. Write their significance.
9. Give a brief account of meristematic tissues of plants.
10. Compare the structures of parenchyma, collenchymas and sclerenchyma.