

**KENDRIYA VIDYALAYA NO.1**  
**SHIVPORA, BATWARA SRINAGAR-190004**  
**WINTER VACATION HOME WORK/PROJECT**  
SESSION (2018-2019)

**CLASS IX**

**SUBJECT: SCIENCE**

1. Revise all the chapters and complete your notebook.
2. Make notes on chapter "Diversity in Living Organism.
3. Make a working model on energy conservation designs of machine/building/household things.
4. Make a project report and chart on the above model.
5. Self-design action plan for annual examination 2019.

Assignment

Give reasons:

- a. A gas fills completely the vessel in which it is kept.
  - b. A wooden table should be called a solid.
6. Suggest a method to liquefy atmospheric gasses?
  7. Differentiate between liquid, solid & gas?
  8. Define latent heat of vaporization. Which will produce more severe burns steam or boiling water at the same temperature?
  9. A. Why nucleus is called the controller of cell?  
B. Lysosomes are suicidal bags of cell?  
C Mitochondria is called power house of cell?
  10. A train starting from rest attains a velocity of 72km/h in 5min. if acceleration is uniform find:
    - a. The acceleration?
    - b. Distance travelled by the train?
  11. Usha swims in 90m long pool and covers 180m in 1m by swimming one end to another and back along same straight path. Find the average speed and average velocity of Usha? \
  12. What do you understand by sustainable agriculture green revolution, hybridization, mixed cropping, intercropping?
  13. What do you understand by disaster management?
  14. If one gram of  $\text{SO}_2$  contains  $x$  molecules, what will be the no. of molecules in 1gm of methane? {S=32u, O=16u, C=12u, H=1u}
  15. An object of weight 200N is floating in a liquid. What is the magnitude of buoyant force acting on it?

16. Compare the properties of electron, proton, and neutron?
17. A constant force acts on an object of mass 5kg for a duration of 2s. It increases the object velocity from 3m/s to 7m/s. Find the magnitude of applied force?
18. Make a chart of diseases spread last year in your locality.
19. Compare the model of atom suggested by different scientists?
20. Differentiate between homogenous and heterogeneous mixture and their properties?

### **SUBJECT: MATHS**

- 1 complete the notebook
- 2 revise all chapters
- 3 make charts according to your rollno group
- 4 make a short notebook and write down the imp formulae of all chapters
- 5 write down the theorem with proofs in short notebook