

1. Name the characteristics of matter that are demonstrated by diffusion.
2. Do all substances change from solid to liquid and liquid to gas on heating? Explain
3. A body leaving a certain point "O" moves with a constant acceleration. At the end of the 5th second its velocity is 1.5 m/s. At the end of the sixth second the body stops and then begins to move backwards. Find the distance traversed by the body before it stops. Determine the velocity with which the body returns to point "O"? (27m, -9 m/s)
4. How do you appreciate Galileo's thought of "any moving body continues in the state only until some external force acts on it" which is a contradiction to the Aristotile's belief of "any moving body naturally comes to rest".
5. Determine the mass by mass percentage concentration of a 100g salt solution which contains 20g salt?
6. Imagine what would happen if we do not have standard symbols for elements?
7. What is the main difference between isotopes of the same element?
8. An apple falls from a tree. An insect in the apple finds that the earth is falling towards it with an acceleration g . Who exerts the force needed to accelerate the earth with this acceleration?
9. How can you find the relative density of a liquid?
10. Draw a diagram to show conservation of mechanical energy in case of free falling body.
11. How do you appreciate efforts of a musician to produce melodious sound using a musical instrument by simultaneously controlling frequency and amplitude of the sounds produced by it.
12. Who and when proposed cell theory. What are salient features of it?
13. "Bark cells are impervious to gases and water". What experiment you will perform to prove this?
14. Ramu felt weak. Ramu's father took him to hospital. The doctor advised a blood test. The report says that he does not have the required levels of haemoglobin. What are its ill effects?
15. What are the advantages of classifying organisms?
16. How behaviour of human is different from behaviour of other animals? Explain with an example.
17. "Understanding of animal behaviour creates positive attitude towards animals." how you support this statement? Explain with suitable examples.
18. How are biofertilizers more beneficial as compared to chemical fertilizers?
19. Prepare flow chart to describe soil pollution, causes and methods of control.
20. What do you understand by Ozone layer? Write an essay to participate in election competition on importance of ozone layer.