CBSE Class 9 Biology Worksheet - Fundamental unit of life

Q1 Write the main function of leucoplast.
Q2 What is the function of SER in liver cells of vertebrates?
Q3 Why the RER appears rough?
Q4 Why viruses are not supposed to be living?
Q5 What is a nucleoid?
Q6 Why dry raisins placed in water swell up?
Q7 In which part of a plant chromoplasts are found?
Q8 Where are genes located?
Q9 What will happen if we keep a plant cell or animal cell in a
i) Hypotonic solution ii) Hypertonic solution iii) Isotonic solution.
Q10 Explain the importance of osmosis for living beings?
Q11 Give the historical development of cell theory.
Q12 Who coined the term “cell “ and how?
Q13 Write the contribution of (a) Robert Hooke, (b) Leeuwenhoek (c) Robert Brown
Q14 Draw a large diagram of an animal cell as seen through aan electron microscope. Label the parts that carry on the function of Respiration, secretion, protein synthesis, transport of material.
Q15 Which substance is responsible for transfer of characters from one generation to another?

CBSE Class 9 Chemistry Worksheet - Matter In Our Surrounding

1. What is matter? What are the physical states of matter?
2. With the help of an activity, show particulate nature of matter.
3. What are characteristics of particles of matter?
4. What is diffusion? Give an example.
5. Write any five characteristics of solids, liquids and gases.
6. Why can we smell hot food from a distance?
7. Why does a solid change into liquid on heating?
8. Define latent heat of fusion.
9. Give reason – A gas fills completely the vessel in which it is kept.
10. Why a wooden table should be called solid?
11. Why more serious burns are caused by steam at 1000c than water at same temperature?
12. Why can a sponge be compressed though it is a solid?
13. Carry out following conversion (a) 500c to Kelvin (b) 200 k to Celsius.
14. Name the conditions to liquefy a gas.
15. Why are clothes spread out for drying?
16. What kind of clothes is most suitable for summers? Why?
17. What is sublimation? Explain with help of an activity and a diagram.
18. Washed clothes dry up more quickly on a hot summer day than on a rainy day. Why?
19. What is the difference between evaporation and boiling?
20. Define latent heat of vaporization.
21. Wearing synthetic clothes in summers is usually avoided. Why?
22. How does water get cooled in an earthen pot?
23. What is dry ice?
24. Name the factors affecting evaporation.
25. How does evaporation cause cooling? Explain with example.
26. How can physical state of matter be changed?

CBSE Class 9 Chemistry Worksheet - IS MATTER AROUND US PURE

1. What are mixtures? Give examples.
2. What are pure substances?
3. Why do we call sugar a pure substance?

4. What are saturated and unsaturated solutions?
5. Define a solution.
6. What is a suspension? Give its example and properties.
7. Define concentration of a solution.
8. What is Tyndall effect?
9. What is the difference between True solution and colloids?
10. What are alloys? Why are alloys called as mixture?
11. Write the characteristics of brass.
12. Define solute and solvent.
13. What is solubility?
14. Give properties of a true solution.
15. Why do we need to separate mixtures?
16. How can we separate cream from milk?
17. Write the applications of centrifugation.
18. How can we separate a mixture of salt and ammonium chloride? Draw a diagram.
19. What is chromatography? Explain the process.
20. How can you separate copper sulphate from an impure sample?
21. What types of mixture are separated by fractional distillation process? Draw a diagram.
22. Draw a diagram to explain the process of separating acetone and water.
23. Explain with the diagram the method of separating kerosene oil from water by using a separating funnel.
24. What are physical and chemical changes?
25. Write difference between mixtures and compounds.
26. Give definitions of elements and compounds.
27. What are metals and non-metals?
28. If 110g of salt is present in 550 g of solution, calculate the concentration.
29. What is the concentration of a solution which contains 16 g of urea in 120 g of solutions?
30. How much water should be added to 15 g of salt to obtain 15% salt solution?
31. A solution contains 5.6 ml of alcohol mixed with 76 ml of water. Calculate the concentration of the solution.
32. How much water should be added to 12 ml of alcohol to obtain 12% alcohol solution?
33. If 25 ml of acetone is present in 150 ml of its aqueous solution, calculate the concentration.