St. THOMAS SCHOOL

Class VII Worksheet (Science)

BIOLOGY

1. **An athlete feels breathless after running a long race. Why?**

2. **With the help of a labeled diagram, describe the respiratory system in humans.**

3. **Differentiate between aerobic and anaerobic respiration.**
4. **How would you show that exhaled air has more carbon dioxide than inhaled air?**
5. **What is dialysis? How does it work?**
6. **Differentiate between arteries and veins**
7. **What is excretion? List the organs of the human excretory system.**
8. **Explain the process of fertilization. Write the different steps in the formation of seeds and fruits.**
9. **Define pollination. What are the two types of pollination? Explain the different agents of pollination with examples.**
10. **Describe the advantages of vegetative reproduction.**

CHEMISTRY

1. **Is the distilled water acidic/basic/neutral? How would you verify it?**
2. **Describe the process of neutralisation with the help of an example.**
3. **(a) An antacid tablet is taken when you suffer from acidity.**
   (b) Calamine solution is applied on the skin when an ant bites.
   (c) Factory waste is neutralised before disposing it into the water bodies.
4. **When baking soda is mixed with lemon juice, bubbles are formed with the evolution of a gas. What type of change is it? Explain.**
5. **Describe how crystals of copper sulphate are prepared.**
6. **Explain why rusting of iron objects is faster in coastal areas than in deserts.**
7. **Why should oils and fats be not released in the drain? Explain.**
8. **Write two examples of chemical and physical change.**

9. **Explain the carbon dioxide is an acidic in nature with the help of diagram.**

10. **Which gas is called natural shield against the radiations ? Explain how.**

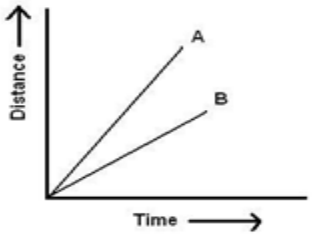
11. **What is rusting of iron ? What are the essential conditions for rusting ?**

12. **Explain the relationship between sanitation and disease.**
13. **What do you mean by cleaning of water ?**
14. **Explain the process of the treatment of water at waste water treatment plant to get clarified water.**

15. **Explain some house keeping practices to minimize waste at their source.**

Worksheet Physics Class VII

1. **An electrician is carrying out some repairs in a building. He wants to replace a fuse by a piece of wire. Would you agree with the electrician? Give reasons for your response.**
2. **How fuses are useful?**
3. **When the current is switched on through a wire, a compass needle kept nearby gets deflected from its north-south position. Explain.**
4. **What are filaments of a bulb and a heater made up of?**
5. **Why are fuse wire not used in circuit containing electric cell?**
6. **What is electric bell?**
7. **What is the working principle of electric bell?**
8. **What is the purpose of using an electromagnet in an electric bell?**
9. **Give two methods by which we can increase the strength of magnetic field produced by a circular coil carrying current?**
10. **Mention the differences between an electromagnet and a permanent magnet.**
11. **Define average speed.**
12. **Name the device used to measure speed.**
13. **What type of graph is used to represent motion of an object?**
14. **What do you mean by non-uniform speed?**
15. **A child is on see-saw, what kind of motion he have and why? Explain.**
16. **A simple pendulum takes 15 seconds to complete 5 oscillations. What is the time period of pendulum?**
17. **If a car is moving with a speed of 5Km/h on highway then find the distance travelled by the car in 4 hours?**
18. **Sumit covers a distance of 2.4 Km from his house to reach her college on a scooter. If the scooter has a speed of 6m/sec, calculate the time taken by her to reach the college.**
19. **The odometer of a car reads 57321.0 km when the clock shows the time 08:30 AM. What is the distance moved by the car, if at 08:50 AM, the odometer reading has changed to 57336.0 km? Calculate the speed of the car in km/min during this time. Express the speed in km/h also.**
20. **Salma takes 15 minutes from her house to reach her school on a bicycle. If the bicycle has a speed of 2 m/s, calculate the distance between her house and the school.**
21. **The distance between two stations is 300 km. A train takes 6 hours to cover this distance. Calculate the speed of the train.**
22. **Show the shape of the distance-time graph for the motion when a car parked on a side road.**
23. **Look at the graph below of two vehicles A and B, which one of them is moving faster.**



24. **A car moves with a speed of 40 km/h for 5 minutes and then with a speed of 60 km/h for the next 5 minutes. Find the total distance covered by the car.**
25. **Why does the mercury not fall or rise in a clinical thermometer when taken out of the mouth?**
26. **Why clinical thermometer ranges from 35 ^{o}C to 42 ^{o}C.?**
27. **Explain how water heated by convection?**
28. **What is the average body temperature of a healthy person?**
29. **What is the range of laboratory thermometer?**
30. **Why do cooking utensils have a copper bottom?**
31. **How does the heat from the sun reach us?**
32. **Differentiate between conductor and insulators?**
33. **In summer we prefer light-coloured clothes and in winter we usually wear dark-coloured clothes. Explain Why?**
34. **Why one thick blanket is less warm up than two thin blankets joined together?**
35. **In places of hot climate it is advised that the outer walls of houses be painted white. Explain.**
36. **Which property of liquids is used in making thermometer?**
37. **Explain land breeze and sea breeze.**