



**TAPOVAN INTERNATIONAL SCHOOL**  
**Worksheet (2018-19)**

**Sub:** Biology

**Class:** IX

**Chapter/Topic:** 5; Fundamental unit of life

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**Q1. Write the functions of the following cell organelles**

- |                                 |             |
|---------------------------------|-------------|
| a. Smooth endoplasmic reticulum | c. RNA      |
| b. DNA                          | d. Lysosome |

**Q2. Answer the following questions:**

1. Why dry raisins swell up in water?
2. Why viruses are not supposed to be living?

**Q3. What will happen if we keep plant and animal cell in**

- |                        |                      |                       |
|------------------------|----------------------|-----------------------|
| a) Hypertonic solution | b) Isotonic solution | c) Hypotonic solution |
|------------------------|----------------------|-----------------------|

**Q4. Differentiate between:**

- |                          |                                    |
|--------------------------|------------------------------------|
| a. Diffusion and osmosis | b. Prokaryotic and Eukaryotic cell |
| c. SER and RER           | d. DNA and RNA                     |

**Q5 Give one word answer:**

1. Protein factory of the cell.
2. Power house of the cell.
3. Head quarter of the cell.
4. Suicidal bag of the cell.
6. Convert simple sugar to complex sugar.
7. Do detoxification in the cell
8. Perform membrane biogenesis.

**Q6 . Draw a neat and labelled diagram of**

- |                 |                |            |
|-----------------|----------------|------------|
| a. Mitochondria | b. Chloroplast | c. Nucleus |
|-----------------|----------------|------------|



**TAPOVAN INTERNATIONAL SCHOOL**  
**Worksheet - April (2018-19)**

**Sub: Chemistry**

**Class: 9<sup>th</sup>**

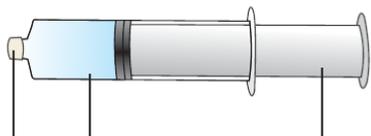
**Chapter/Topic: CHP: -1 Matter In Our Surroundings**

1. Match the physical quantities given in column 'A' with SI units of column 'B'

<b>A</b>		<b>B</b>	
i.	Pressure	a.	Cubic metre ( )
ii.	Temperature	b.	Kilogram ( )
iii.	Density	c.	Pascal ( )
iv.	Mass	d.	Kelvin ( )
v.	Volume	e.	Kg/cubic metre ( )

2. You visit a natural gas compressing unit. What suggestions you will give to compress the gas?

3. Label the given figure. And describe an activity using the same to study about gas. Which properties of gas can be studied through this simple activity.



4. Differentiate between solid, liquid and gas(any four points):

<b>SOLID</b>	<b>LIQUID</b>	<b>GAS</b>



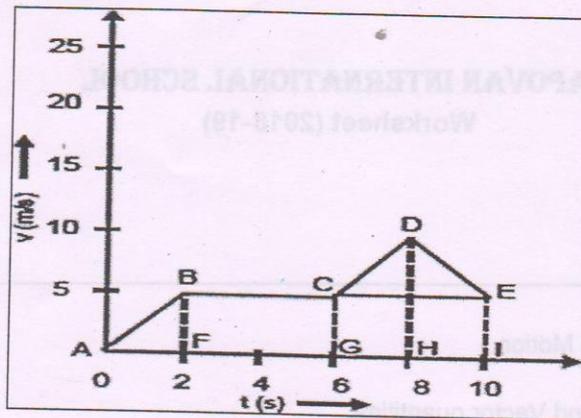
**TAPOVAN INTERNATIONAL SCHOOL**  
**Worksheet (2018-19)**

**Sub: Physics**  
**Chapter/Topic: 8 / Motion**

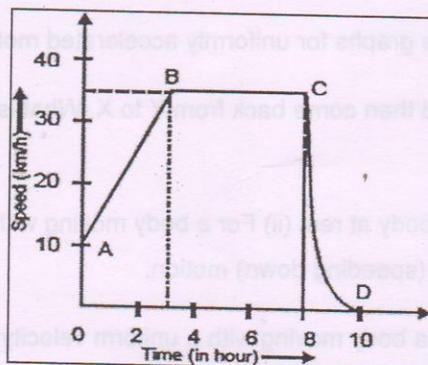
**Class: 9<sup>th</sup>**

1. Distinguish between Rest and Motion.
2. Distinguish between Scalar and Vector quantities.
3. Distinguish between Speed and Velocity.
4. Difference between Uniform and Non-Uniform motion.
5. Define: Scalar and vector quantities, Distance, Displacement, Speed, velocity, acceleration, Uniform and non-Uniform motion.
6. Derive first equation of motion by graphical method.
7. Derive second equation of motion by graphical method.
8. Derive third equation of motion by graphical method.
9. ~~Define uniform circular motion.~~
10. Slope of distance - time graph gives \_\_\_\_\_.
11. Slope of velocity - time graph gives \_\_\_\_\_.
12. Draw distance-time and velocity-time graphs for uniform motion.
13. Draw distance-time and velocity-time graphs for uniformly accelerated motion.
14. An object goes from point X to Y and then come back from Y to X. What is the displacement and average velocity?
15. Draw distance-time graph: (i) For a body at rest (ii) For a body moving with uniform speed (iii) For accelerated motion (iv) For decelerated (speeding down) motion.
16. Draw velocity – time graph (i) when a body moving with a uniform velocity (ii) When a body starts from rest and moves with uniform acceleration (iii) When a body is moving with uniform acceleration and its initial velocity is not zero (iv) When a body is moving with decreasing acceleration.
17. Define: Average speed, Average velocity.

18. Find the total displacement of the body from the following graph:



19. A car travels at 54 km/h for first 20 s, 36 km/h for next 30 s and finally 18 km/h for next 10 s. Find its average speed.
20. Define uniform circular motion and give example of it. Why is it called accelerated motion?
21. A circular track has a circumference of 3140 m with AB as one of its diameter. A scooterist moves from A to B along the circular path with a uniform speed of 10 m/s. Find
- Distance covered by the scooterist,
  - Displacement of the scooterist, and
  - Time taken by the scooterist in reaching from A to B.
22. The graph given alongside shows how the speed of a car changes with time.
- What is the initial speed of the car?
  - What is the maximum speed attained by the car?
  - Which part of the graph shows zero acceleration?
  - Which part of the graph shows varying retardation?
  - Find the distance travelled in first 8 hours.





# TAPOVAN INTERNATIONAL SCHOOL

Worksheet (2018-19)

Sub: Social Science

Class: IX

Chapter/Topic:

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## Chapter -1 . India – Size and Location

**QI. Answer the following questions. Answer of these questions should not exceed 20 words**

1. Name the states that share land border with Bhutan.
2. Which neighbouring country would you reach if you were to sail across the Palk Strait?
3. Name the southernmost point of Indian Union. Is it visible today?
4. Which is the westernmost Union Territory of India?
5. Which country among the India's neighbours is the smallest?
6. Name any two states which are situated near Himalayas.

**QII. Answer the following questions. Answer of these questions should not exceed 100 words.**

7. What is the longitudinal extent of India? What is its implication?
8. Explain why Ahmedabad and Kolkata are able to see the noon sun exactly overhead in a year but not Delhi?
9. Why is the difference between the duration of day and night hardly felt at Kanyakumari but not so in Kashmir?
10. "India has a long coastline which is advantageous" Explain

OR

What is the importance of Indian Ocean for India?

11. Land routes were very important for cultural and economic development of ancient India. Explain

OR

How have the ancient and much older routes contributed to exchange of ideas and goods?

12. What is the latitudinal extent of India? How is the latitudinal spread in India advantageous to her? State any two points.
13. Latitudinal and longitudinal extent of India is about  $30^{\circ}$ . Then why is the North-South extent bigger than East- West extent?
14. How do longitudinal and latitudinal locations influence the duration of the day and night and time along the Standard Meridian of India?

## Chapter -1 . French Revolution

### **Answer the following questions:**

1. Explain how did the freedom of speech and expression under the revolutionary Government in France promotes the ideals of liberty and equality into everyday practice.
2. Describe cause for the fall of Jacobin government in France.
3. What were the causes for the empty treasure of France under Louis XIV. Explain
4. Describe the steps taken by the Revolutionary governments of France for improving the life of women.
5. Why were the representatives of the third Estate disappointed with the pattern of voting in the Estate General.
6. Explain how the new political system of Constitutional Monarchy in France worked?
7. Why did subsistence crisis frequently occur in France during the old regime?
8. State the election process of the National Assembly in France
9. What was the significance of 'The Tennis Court Oath' in the French Revolution.
10. Discuss the impact of abolition of censorship in France.
11. Explain triangular slave trade carried on during 18<sup>th</sup> and 19<sup>th</sup> century.
12. Describe the importance of the declaration of the Right of Man in France.
13. Describe the contribution of French philosophers in the French Revolution.
14. What were the main causes of the French Revolution in 1789? Explain
15. What were the results of French Revolution for France?
16. What were the reforms introduced by Napoleon Bonaparte in France?
17. "The inequality that existed in the French Society in the Old Regime became the cause of French Revolution". Justify the statement by giving three suitable examples.
18. Why did the King Louis XVI conclude to increase taxes? Assess any three points.
19. How did the new middle class and philosophers contribute to the cause of French Revolution? Explain.
20. How was the French society organized? What privileges did certain sections of society enjoy? Discuss.
21. What impact did French Revolution have on the people of the world? Give points.
22. Give reasons as to why the period from 1793 to 1794 is referred to as the ' Reign of Terror in France'
23. Describe the condition of women in France before the revolution.
24. What landmark decisions were taken by the National Assembly led by the Third Estate on 4<sup>th</sup> August 1789.
25. Discuss the role of women in the French Revolution.
26. Explain the conditions which led to the rise of Jacobins
27. Explain the role of political clubs in France.
28. What was the contribution of Mirabeau and Abbe Seiyes to the French Revolution. Who were they?
29. Trace the events which led to the outbreak of French Revolution.
30. How was church responsible for the French Revolution? Mention three points.
31. How did the peasant contribute to the outbreak of French Revolution? Explain.



**TAPOVAN INTERNATIONAL SCHOOL**  
**Worksheet (2018-19)**

**Sub: MATHEMATICS**

**Class: IX**

**Chapter: Number System and Co-ordinate Geometry**

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1. Find the value of  $(729)^{\frac{1}{6}}$ .
2. Find an irrational number between  $\frac{1}{11}$  and  $\frac{2}{11}$  when it is given that  $\frac{1}{11} = 0.\overline{09}$ .
3. Express  $1.\overline{53}$  is in the form of  $\frac{p}{q}$ , where  $p$  and  $q$  are integers and  $q \neq 0$ .
4. Find three rational numbers between  $\frac{1}{7}$  and  $\frac{2}{7}$ .
5. Find the value of  $y$  :  $\left(\frac{1}{2}\right)^4 \times 2^{-8} = \left(\frac{1}{2}\right)^{3y}$
6. Show that  $(2 + \sqrt{5})(2 - \sqrt{5})(3 + \sqrt{2})(3 - \sqrt{2})$  is rational number.
7. What number do we obtain on rationalizing the denominator of  $\frac{1}{\sqrt{7}+2}$ .
8. Represent  $\sqrt{10}$  on number line.
9. Represent  $\sqrt{4.5}$  on number line.
10. Find the value of  $a$  and  $b$ , if  $\frac{3+\sqrt{2}}{3-\sqrt{2}} = a + b\sqrt{2}$ .
11. Find the value of  $\frac{4}{(216)^{-\frac{2}{3}}} + \frac{1}{(256)^{-\frac{3}{4}}} + \frac{2}{(343)^{-\frac{1}{3}}}$ .
12. Simplify:  $\left(4(64)^{\frac{1}{3}} + (81)^{\frac{1}{2}}\right)^{\frac{1}{2}}$ .
13. Plot the following points and check whether they are collinear or not:  
(i)  $(2,3), (3,2), (1, -5)$       (ii)  $(-3,3), (-3,5), (1, -1)$
14. Plot the points  $P(-2, -1), Q(-1, -2), R(2,1)$  and  $S(3,3)$ . join them and write the name of the figure thus obtained.
15. Plot the points  $A(2,0), B(2,2), C(0,2)$  and draw the line segments OA, AB, BC, OC, what do you obtain? Find its area.
16. Locate the points in the Cartesian plane if their co-ordinates are given as  $A(5,0), B(0,3), C(7,2), D(-4,3), E(-3, -2)$  and  $F(3, -2)$ .
17. Find the mirror image of  $(9,6)$  on X –axis.
18. Find the mirror image of  $(8, -6)$  on Y –axis.
19. Find the quadrant in which a point has both the co-ordinate have same sign.
20. Find the quadrant in which a point has both the co-ordinate have opposite sign.
21. Find the perpendicular distance of  $P(7,5)$  from both the axes.
22. From the given graph, find

- (i) the co-ordinate of points V and J
- (ii) the abscissa of points I and M
- (iii) the ordinates of points A and B
- (iv) the perpendicular distance of the point N from the Y- axis.