

Sujects	Summer Holidays Homework			
English	Make illustrative presentations on any book which you read It can be through			
	Charts/ flashcards etc . Pick up any character and describe summary as well .			
	Suggested Material:			
	<ul> <li>The Alchemist by Paulo Coelho</li> <li>The Diary of A Young Girl By Anne Frank</li> </ul>			
	The Kite Runner by Khaled Hosseini			
	The God of Small Things by Arundhati Roy			
	To Kill A Mockingbird by Harper Lee			
	Norwegian Wood by Haruki Murakami			
	Ikigai by Francesc Miralles and Hector Garcia. Etc.			
	<ul> <li>Covidiots Those who do not abide by the rules/ precautions of the pandemic ( and there are plenty around) , Write a Descriptive Paragraph on such habitual offenders. Talk to a variety of people ,know their view points and on the basis of your survey , do this assignment. Pics of your survey and a set of probable questions along with a Descriptive Paragraph should be mentioned .</li> <li>How to present: Scrap Book</li> </ul>			
Hindi	1. प्रतिदिन एक सुलेख के हिसाब से कुल 20 सुलेख लिखो।			
	2. अभी तक पढ़ाए गए पाठों की पुनरावृत्ति(याद) करो।			
	3. मैथिलीशरण गुप्त द्वारा रचित राष्ट्रवादी काव्य "भारत-भारती" को पढ़कर, उसमें बताई			
	गयी बातों तथा तथ्यों को व्याख्यायित करते हुए एक ऑडियो-वीडियो का निर्माण कर			
	यूट्यूब लिंक सेंड करो।			

Mathematics	<ul><li>1.Make a Painting Using Mathematical Shapes use any ancient art forms like worli art etc.</li><li>2. Revise Ch. 1 and Ch. 2.</li><li>3. Solve the given worksheet.</li></ul>	with help of water colors/ Poster colors. You can			
Science	<ol> <li>Make a video containing full explanation of the three States of Matter.</li> <li>Prepare a herbarium of 10 sheets.</li> <li>Prepare model of possible cell organelles with help of clay soil.</li> <li>Solve the given assignments.</li> </ol>				
Social Science	Activity – Documentary Making Topic – Disaster Management Instruction - Make a 3 to 5 Minutes Documentary Video on Disaster Management  **Reep in mind the following points :-  Create awareness in them about different disasters, their consequences and management.  Preparations in advance to face such situations  Create awareness and preparedness among the community.  For Reference - <a href="https://www.youtube.com/watch?v=EUpMtllh1To">https://www.youtube.com/watch?v=EUpMtllh1To</a>				
	Revise the Following Chapters:				
	India and the Contemporary World- I	The French Revolution			
	Contemporary India	India :Size and Location			
	Democratic Politics	What is Democracy? Why Democracy?			
	Economics	The Story of Village Palampur			
	Answer the questions mentioned in the giver	n assignment			
	Assignment -	- Social Science			

- 1) Write a short note on the document 'Declaration of the Rights of Man and citizen.'
- 2) What is the significance of the "Tennis Court Oath" in the French Revolution?
- 3) Write the importance of Napoleon Bonaparte in the History of France and the world.
- 4) What landmark decisions were taken by the National Assembly led by the Third Estate on 4th August, 1789?
- 5) Explain the turmoil in France while the National Assembly was busy at Versailles.
- 6) Describe how the new political system of constitutional monarchy worked practice in France.
- 7) Who were Jacobins? What was their role in emergence of France as a Republic?
- 8) Evaluate the role of women in France before the revolution.
- 9) How did philosophers influence the thinking of the people of France?
- 10) How did the Revolution affect the everyday life of the French people? Discuss.
- 11) Why is India called a subcontinent?
- 12) How have been mountain passes been helpful in India since historic times? Explain.
- 13) Why Is the knowledge of latitude and longitude important for people?
- 14) How has the long coastline been beneficial to India?
- 15) Explain why 82°30′ E an odd value has been chosen as the standard meridian of India.
- 16) Why is the difference between the durations of day and night hardly felt at Kanyakumari but not so in Kashmir?
- 17) Why is Indian Ocean named after our country? Give three reasons.
- 18) What is representative democracy?
- 19) Mention three essential features of democracy.
- 20) "China's famine of 1958-61 was a result of government policies." Explain.
- 21) How does democracy improve the quality of decision-making?
- 22) How does democracy enhance the dignity of the citizens?
- 23) Democracy provides a method to deal with differences and conflicts. Explain.
- 24) Why is democracy considered the best form of government?
- 25) What is the role of citizens in a democracy?
- 26) Give detail about Green Revolution.
- 27) What are the different ways of increasing production on the same piece of land? Use examples to Explain.
- 28) Why do you think that farmers should avoid the use of chemical fertilizers to get more production?
- 29) Give examples of fixed capital and working capital.
- 30) What is human capital?

# Assignment – Science

- 1. A train accelerates from 36 km/h to 54 km/h in 10 sec.
  - (i) Acceleration
  - (ii) The distance travelled by car.

- 2. A truck travelling at 54 km/h is slow down to 36 km/h in 10 sec. Find the retardation
- 3. A train starts from rest and accelerate uniformly at the rate of 5 m/s<sup>2</sup> for 5 sec. Calculate the velocity of train in 5 sec.
- 4. The maximum speed of a train is 90 km/h. It takes 10 hours to cover a distance of 500 km. Find the ratio of its average speed to maximum speed?
- 5. A car start from rest and acquire a velocity of 54 km/h in 2 sec. Find(i) the acceleration
  - (ii) distance travelled by car assume motion of car is uniform?
- 6. An object dropped from a cliff falls with a constant acceleration of 10 m/s<sup>2</sup>. Find its speed 5 s after it was dropped.
- 7. A ball is thrown upwards and it goes to the height 100 m and comes down
  - 1) What is the net displacement?
  - 2) What is the net distance?
- 8. Two cars A and B race each other. The Car A ran for 2 minute at a speed of 7.5 km/h, slept for 56 minute and again ran for 2 minute at a speed of 7.5 km/h. find the average speed of the car A in the race.
- 9. An object starting from rest travels 20 m in first 2 s and 160 m in next 4 s. What will be the velocity after 7 s from the start.
- 10. A bus travels a distance of 120 km with a speed of 40 km/h and returns with a speed of 30 km/h. Calculate the average speed for the entire journey.
- 11. A car moves with a speed of 30 km/h<sup>-1</sup> for half an hour, 25 km/h<sup>-1</sup> for one hour and 40 km/h<sup>-1</sup> for two hours. Calculate the average speed of the car.
- 12. Arrange the following speeds in increasing order (keeping the least speed first):
  - a. An athlete running with a speed of 10 m/s
  - b. A bicycle moving with a speed of 200 m/min.
  - c. A scooter moving with a speed of 30 km/h.
- 13. A motorcyclist drives from place A to B with a uniform speed of 30 km h<sup>-1</sup> and returns from place B to A with a uniform speed of 20 km h<sup>-1</sup>. Find his average speed.
- 14. If a bus travelling at 20 m/s is subjected to a steady deceleration of 5 m/s², how long will it take to come to rest?
- 15. A train travels the first 15 km at a uniform speed of 30 km/h; the next 75 km at a uniform speed of 50 km/h; and the last 10 km at a uniform speed of 20 km/h. Calculate the average speed for the entire train journey
- 16. A body travels a distance of 3 km towards East, then 4 km towards North and finally 9 km towards East.
  - (i) What is the total distance travelled?
  - (ii) What is the resultant displacement?
- 17. A ball hits a wall horizontally at 6.0 m s<sup>-1</sup>. It rebounds horizontally at 4.4 m s<sup>-1</sup>. The ball is in contact with the wall for 0.040 s. What is the acceleration of the

ball?

- 18. A cyclist is travelling at 15 m s<sup>-1</sup>. She applies brakes so that she does not collide with a wall 18 m away. What deceleration must she have ?
- 19. A person travels on a semi-circular track of radius 50 m during a morning walk. If he starts from one end of the track and reaches the other end, calculates the distance traveled and displacement of the person.
- 20. Dinesh takes 20 minutes to cover a distance of 5 km on a bicycle. Calculate his average speed in
  - 1. m/s
  - 2. km/h

#### **Maths Worksheet:**

Q1. Find three rational numbers between:

(i) 1/3 and 5/4. (ii) 3/7 and 2/7. (iii). -3/5 and -1/3

Q2. Find three irrational numbers between

(i) -11 and -12. (ii) 11/4 and 13/5. (iii)  $\sqrt{2}$  and  $\sqrt{3}$ 

Q3. Express the following in the form of p/q where p, q are integers,  $q \neq 0$ 

(i)  $0.03\overline{2}$  (ii)  $4.3\overline{8}$ 

Q4. Simplify the following:

(i)  $(5+\sqrt{7})(2+\sqrt{5})$ 

(iii)  $(2\sqrt{3} + 6\sqrt{5}) (5\sqrt{2} - 3\sqrt{3})$ 

(ii) (ii) (V11 + V7) (V11 - V7) (IV) (8V2 + 3V5) (3V2 - 6V3)

Q.5. If x + y = 12 and xy = 32, Find the value of  $x^2 + y^2$ .

Q.6. If 3x + 2y = 12 and xy = 6, find the value of  $9x^2 + 4y^2$ .

Q.7. Draw the graph of each of the equations given below. Also, find the coordinates of the point where the graph cuts the co-ordinates axis:

(a) 6x - 4y = 12

(b) 4y - x = 8

Q.8. The taxi fare in a delhi is as follows: For the first kilometer, the fare is Rs16 and for the subsequent distance it is Rs 10/km. Taking the distance covered as x km and total fare as Rs y, write a linear equation for this information, and draw its graph.

Q.9. Draw the graph of the equation 2x + 3y = 12. From the graph, find the coordinates of the point:

Whose y- coordinate is 3

Whose x- coordinate is -3.

Q.10. Determine the point on graph of equation 2x + 5y = 20 whose x - coordinate is 5/2 times its ordinate.

#### **Biology Assignment**



## THE FUNDAMENTAL UNIT OF LIFE

Multiple Choice Questions

Which of the following can be made into crystal?
 (a) A Bacterium

- 5. Which of these is not related to endoplasmic reticulum?
- Which of these is not related to  $\frac{1}{2}$  (a) It behaves as transport channel for proteins between  $n_{ucle_{U_{\delta}}}$ 
  - (b) It transports materials between various regions in cytoplasm
  - (c) It can be the site of energy generation
  - (d) It can be the site for some biochemical activities of the cell
- 6. Following are a few definitions of osmosis

Read carefully and select the correct definition

- Read carefully and select the content are gion of higher concentration through a semipermeable manufacture that the content are the content at the content are gion of higher concentration through a semipermeable manufacture that is a semipermeabl a region of lower concentration through a semipermeable membrane
- (b) Movement of solvent molecules from its higher concentration to  $l_{0W_{e_1}}$
- (c) Movement of solvent molecules from higher concentration to  $l_{0\text{We}}$ concentration of solution through a permeable membrane
- (d) Movement of solute molecules from lower concentration to higher concentration of solution through a semipermeable membrane
- 7. Plasmolysis in a plant cell is defined as
  - (a) break down (lysis ) of plasma membrane in hypotonic medium
  - (b) shrinkage of cytoplasm in hypertonic medium
  - (c) shrinkage of nucleoplasm
    - (d) none of them
- 8. Which of the following are covered by a single membrane?
  - (a) Mitochondria
  - (b) Vacuole
  - (c) Lysosome
  - (d) Plastid
- 9. Find out the false sentences
  - (a) Golgi apparatus is involved with the formation of lysosomes
  - (b) Nucleus, mitochondria and plastid have DNA; hence they are able to
  - (c) Mitochondria is said to be the power house of the cell as ATP is
  - (d) Cytoplasm is called as protoplasm
- 10. Find out the correct sentence
  - (a) Enzymes packed in Lysosomes are made through RER (rough
  - endoplasmic reticulum and smooth endoplasmic reticulum and smooth endoplasmic reticulum respectively
  - produce lipid and produce (c) Endoplasmic reticulum is related with the destruction of plasma
  - membrane (d) Nucleoid is present inside the nucleoplasm of eukaryotic  $n_{ucle_{u_S}}$

 $E_{XEMPLAR}$   $P_{ROBLEMo}$ 

- 11. Which cell organelle plays a crucial role in detoxifying many poisons and drugs in a cell?
  - (a) Golgi apparatus
  - (b) Lysosomes
  - (c) Smooth endoplasmic reticulum
  - (d) Vacuoles
- 12. The proteins and lipids, essential for building the cell membrane, are manufactured by
  - (a) rough endoplasmic reticulum
  - (b) golgi apparatus
  - (c) plasma membrane
  - (d) mitochondria
- 13. The undefined nuclear region of prokaryotes are also known as
  - (a) nucleus
  - (b) nucleolus
  - (c) nucleic acid
  - (d) nucleoid
- 14. The cell organelle involved in forming complex sugars from simple sugars are
  - (a) endoplasmic reticulum
  - (b) ribosomes
  - (c) plastids
  - (d) golgi apparatus
- 15. Which out of the following is not a function of vacuole?
  - (a) Storage
  - (b) Providing turgidity and rigidity to the cell
  - (c) Waste excretion
  - (d) Locomotion
- 16. Amoeba acquires its food through a process, termed
  - (a) exocytosis
  - (b) endocytosis
  - (c) plasmolysis
  - (d) exocytosis and endocytosis both
- 17. Cell wall of which one of these is not made up of cellulose?
  - (a) Bacteria
  - (b) Hydrilla
  - (c) Mango tree
  - (d) Cactus

THE FUNDAMENTAL UNIT OF LIFE

- **18.** Silver nitrate solution is used to study (a) endoplasmic reticulum (b) golgi apparatus (c) nucleus (d) mitochondria 19. Organelle other than nucleus, containing DNA is (a) endoplasmic reticulum (b) golgi apparatus (c) mitochondria (d) lysosome 20. Kitchen of the cell is (a) mitochondria (b) endoplasmic reticulum (c) chloroplast (d) golgi apparatus 21. Lipid molecules in the cell are sythesized by (a) smooth endoplasmic reticulum (b) rough endoplasmic reticulum (c) golgi apparatus (d) plastids 22. Cell arises from pre-existing cell was stated by (a) Haeckel (b) Virchow (c) Hooke (d) Schleiden 23. Cell theory was given by (a) Schleiden and Schwann (b) Virchow (c) Hooke (d) Haeckel 24. The only cell organelle seen in prokaryotic cell is (a) mitochondria (b) ribosomes
- (c) plastids(d) lysosomes

25. Organelle without a cell membrane is

- (a) ribosome
- (b) golgi apparatus
- (c) chloroplast
- (d) nucleus

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- **26.** 1 μm is
  - (a)  $10^{-6}$  m
  - (b) 10<sup>-9</sup> m
  - (c)  $10^{-10}$  m
  - (d) 10<sup>-3</sup> m
- 27. Lysosome arises from
  - (a) endoplasmic reticulum
  - (b) golgi apparatus
  - (c) nucleus
  - (d) mitochondria
- 28. Living cells were discovered by
  - (a) Robert Hooke
  - (b) Purkinje
  - (c) Leeuwenhoek
  - (d) Robert Brown
- 29. Select the odd one out
  - (a) The movement of water across a semi permeable membrane is affected by the amount of substances dissolved in it.
  - (b) Membranes are made of organic molecules like proteins and lipids
  - (c) Molecules soluble in organic solvents can easily pass through the membrane.
  - (d) Plasma membranes contain chitin sugar in plants

### **Short Answer Questions**

- 30. Why are lysosomes known as 'suicide-bags' of a cell?
- **31.** Do you agree that "A cell is a building unit of an organism". If yes, explain why?
- **32.** Why does the skin of your finger shrink when you wash clothes for a long time?
- 33. Why is endocytosis found in animals only?
- **34.** A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.
- 35. Name any cell organelle which is non membranous.
- **36.** We eat food composed of all the nutrients like carbohydrates, proteins, fats, vitamins, minerals and water. After digestion, these are absorbed in the form of glucose, aminoacids, fatty acids, glycerol etc. What mechanisms are involved in absorption of digested food and water?