Orleans -The School-

Above and Beyond...

SUMMER HOLIDAY HOMEWORK
CLASS – IX

(2022-23)

LAZY HAZY SUMMER DAYS,

UNWIND SLOWLY, SUN ABLAZE

SWEETLY SCENTED AIR ABOUNDS

LET'S HAVE SOME FUN AND JUMP AROUND

MESSAGE FOR PARENTS

❖ *Its SUMMER TIME again. Time for strengthening family bond, tying threads of family tree, sharing joys and sorrows, having a good time together. Do shower your love and care on people you meet and get loads of blessings in return.*

❖ *Allow your child to help in your daily chores like cooking, washing the dishes.*

❖ *Allow them to adopt a pet dog or a cat or any other animal, bird or fish.*

❖ *Take good care of you and your loved ones health and hygiene since as you know we are facing a pandemic situation from last year. Avoid heavy and oily food and increase intake of fresh fruits and water to keep yourself well hydrated and energetic.*

❖ *Gently encourage your child to raise a kitchen garden by planting seeds. Knowledge about plants and trees are an integral part of your child's growing up.*

❖ *Use Holiday Homework as an opportunity to spend quality time together. Let your child take the lead and use his/ her imagination, creativity and knowledge to do the assigned task. The role of the parent is to be a facilitator and guide to steer the child in the right direction. He/ She will find his own destination. Original work of students will receive greater recognition and appreciation.*

❖ *Avoid giving chocolates, jellies, cream cakes, aerated drinks and too many bakery products like puff and fried items like samosas.*

❖ *Look into the eyes of your little one and thank God for giving you one wonderful gift. In a few years from now, they will be soaring into greater heights.*

As parents, it is important to invest your time with them now.

(Principal)

MESSAGEFOR STUDENTS

Dear Students,

- *My wish for you is that you see the light in this world, in yourself, and in others. I see the light in you.*
- *Compliment others, and be proud of your own accomplishments. I am proud of you.*
- *Believe in yourself, for you are stronger than you know. I believe in you.*
- *Try hard, but know your limits. Ask if you need help, and trust others will help you. I will help you.*
- *Fill your heart with laughter and smile often. I love to see your smile.*
- *You are a unique, special, and amazing person. There will never be another you. I appreciate all of you.*
- *Follow the guidelines given by teachers to complete specific activities. Only spiral file is to be used. Class display will reflect originality and not seek perfection alone.*
- *Dream, believe, wonder, inspire, love, nurture, and always listen. That is what I will do for you.*

We wish you tons of happiness, joy and fun while you are on vacation!

Love,

Shefaly Jain

ENGLISH

1. Prepare a PowerPoint presentation on Figures of Speech. Explain them with examples to be taken from the poems you have read from your prescribed textbook. There should be approximately 10-15 slides.

OR

Prepare a PowerPoint presentation on any chapter from your prescribed book. You may include slides related to

About the author-Biography

Storyline

Value points

Summary

 Oral comprehension check

Bibliography

There should be approximately 10-15 slides.

2. Diary entry

You are the President of the Welfare organization of your school. Under your guidance and leadership, the club was able to collect a substantial amount for Help Age India which is committed to help the elderly. Express your happiness and sense of pride in the form of a diary entry.

3. Revise all the chapters covered so far.

हिंदी

1. प्रसिद्धलेखिकामहादेवीवर्माकिजीवनपरएकप्रतिरूपतैयारकीजिए |

2. **भारतकीकिन्हीचारमहिलाखिलाड़ी**
   जिन्होंनेअंतर्राष्ट्रीयस्तरपरभारतकागौरवबढ़ायाहोकावर्णननिम्नबिंदुओंकेआधारपरकीजिए -

क) महिलाखिलाड़ीकानाम ,उससेसम्बंधितचित्र

ख) जन्मस्थान ,पारिवारिकपरिचयएवंशिक्षा

ग) महत्वपूर्णअवसरपरप्राप्तहोनेवालेपुरस्कार ,मैडलआदिअन्यजानकारियाँलिखिए |

प्रमुखभारतीयमहिलाखिलाड़ी-**सानियामिर्ज़ा ,सायनानेहवाल ,पीवीसिंधु ,गीताफोगाट
,मैरीकॉमइत्यादि)**

3. रैदास के पदों में जिन संत कवियों का परिचय दिया गया है उनके चित्रों के साथ संक्षेप में उनका परिचय देते हुए पावर पॉइंट प्रस्तुति तैयार कीजिए जैसे नामदेव , सधना आदि ।

4. **किसीएकविषयपरअनुच्छेदलिखिए |**

विकासकाआधार -अनुशासन

अथवा

योगऔरप्राणायामकीमहत्ता

नोट :-*गृहकार्यकोकरतेसमयभाषा ,लेखएवंवर्तनीकीशुद्धताकाविशेषध्यानरखिए |

SOCIAL SCIENCE

Geography

1. Prepare "My own Atlas" on the following topics:

(i) PHYSICAL MAP 1

(a) Tropic of Cancer (Also locate the states on tropic of cancer)   (b) Standard Meridian

(c) Latitudinal extent and Longitudinal extent   (d) Southernmost point of India

e) Northernmost point of India   (f) Easternmost point

(g) Westernmost point

(ii) PHYSICAL MAP 2

(a) Neighbouring Countries   (b) Islands

(iii) POLITICAL MAP 1

(a) States with capitals   (b) Union Territories

(iv) POLITICAL MAP 2

(a) States sharing international boundaries

2. Locate and label the following on the physical map of France from the chapter „The French Revolution" from History: Bordeaux, Nantes, Paris, Alsace, Normandy, Marseilles, Switzerland

3. Prepare picture book on different types of natural vegetation found in India, detailing its features, types of trees found, wild life and regions. (Use only one or two photos for one type forests.

POLITICAL SCIENCE:

1. Interpret the cartoon on page 109 of Civics text book which says "Are these rights only for adults ………………. available to children.

2. Prepare a list of safety measures adopted by your school to manage disaster. Also suggest some ways to handle disasters of any kind.

HISTORY -

3-D Artificial Design of your War Weapon Students need to design 3-d artificial weapon which was used in World War 1 This activity serves the purpose of combing their creativity and Reflection skills.

THE FOLLOWING ASSIGNMENT HAS TO BE DONE IN THE NOTEBOOKS:

1. What was Jacobin club?

2. Name any 3 non-farm activities that were performed by people in Palampur

3. Why does India use a standard meridian? What is the standard meridian for India?

4. Elaborate the French society structure in the 18 centuries.

5. What are the various modes of production? Give details using a flowchart.

6. Why is that the northern plain the most populated and island is moderately populated?

7. Mention any 5 features of Himalayan Mountains.

8. What is the latitudinal and longitudinal extent of India?

9. How did the businessmen pursue their work in Palampur?

10. Who was King Louis XVI? How did he agree for a constitutional monarchy?
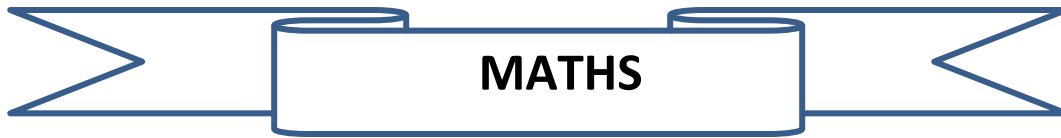
MATHS

- **ACTIVITY BASED WORK**
  Write 4 activities from mathematics lab manual.
  (Keep in mind while writing in math's project file writing should be neat and clean and drawing work should be beautiful.)

  ACTIVITY 1. POLYNOMIALS: To interpret geometrically the factors of a quadratic expression of the type ax^2+bx+c using square grids, strips and paper slips.
  ACTIVITY 2. POLYNOMIALS: To verify the algebraic identity $a^2-b^2= (a+b)(a-b)$.
  ACTIVITY 3. POLYNOMIALS: To verify the algebraic identity $(a+b)^3=a^3+b^3+3a^2b+3ab^2$.

  ACTIVITY 4. POLYNOMIALS: To verify the algebraic identity $(a-b)^3=a^3-b^3-3a^2b+3ab^2$.

Collect the information about 5 Indian Mathematicians and make PPT about them.

- **ASSIGNMENT WORK**
  Do this assignment in home work notebooks.

Class-IX CHAPTER – 1 Number System

(Maths Assignment)

1. Represent the following irrational numbers on number line.

 (i) $\sqrt{10}$ (ii) $\sqrt{17}$ (iii) $2+ \sqrt{2}$

2. Represent geometrically $\sqrt{8.1}$ on number line.

3. Write the following numbers in p/q form (i) 2.0151515…. (ii) 0.235235235….

4. Find two rational numbers and two irrational numbers between $\sqrt{2}$ and $\sqrt{3}$.

5. Simplify

 (i) $2\sqrt{50} +3 \sqrt{32} +4 \sqrt{18}$

(ii) $4 \sqrt{16} - 6 (343)^{1/3} +18 (243)^{1/5} -\sqrt{196}$

 (iii) $4\sqrt{81}-8(216)^{1/3}+15(32)^{1/2}+ \sqrt{225}$

6. If $x=3+2\sqrt{2}$, Check whether $x +1/x$ is rational or irrational

7. Rationalize the denominator

1) $4 \sqrt{3}+5 \sqrt{2}/(4 \sqrt{3}+3 \sqrt{2})$

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

8. If $x =2 + \sqrt{3}$, find $(x +1/x)^{1/3}$

9. Simplify: $\sqrt{6}/ \sqrt{(2+\sqrt{3})} +3\sqrt{2}/(\sqrt{(6+\sqrt{3})}-4\sqrt{3}/(\sqrt{6}+\sqrt{2})$

$\sqrt{72}/(5\sqrt{72}+3\sqrt{288}-2\sqrt{648})$

11. Evaluate $15 /(\sqrt{10} +\sqrt{20} +\sqrt{40}-\sqrt{5} -\sqrt{80}$

If $\sqrt{5} = 2.236$ and $\sqrt{10} = 3.162$

12. Find a and b if $(7+3\sqrt{5}/(3+\sqrt{5}))- (7+3\sqrt{5}/(3-\sqrt{5})=a+b\sqrt{5}$

13. If $\sqrt{(18-6\sqrt{5})}= \sqrt{a} -\sqrt{b}$, then prove that a+b=18.

14. Simplify: $(x^b/x^c)^{b+c-a} \times (x^c/x^a)^{c+a-b} \times (x^a/x^b)^{a+b-c}$

15. Prove that $(x^{a-b})^{a+b} . (x^{b-c})^{b+c} . (x^{c-a})^{c+a} = 1.$

16. Prove that:

$(a^{-1}/ a^{-1}+ b^{-1}) + (a^{-1} /a^{-1} -b^{-1})= 2 b^2/ b^2- a^{2.}$

SCIENCE

PHYSICS

CH – 8: MOTION

1. Make a 3D model on "Save Earth" using house waste material. *(Hint: https://youtu.be/sP-jnLV1mGk)*

OR

Make a 3D model demonstrating "Save Environment" using house waste material. *(Hint: https://youtu.be/avPac4Zmw84)*

2. Do the following questions in your note book.

(i) The velocity time graph of runner is given in the graph.

(a) What is the total distance covered by the runner in 16 s?

(b) What is the acceleration of the runner at t = 11 s?
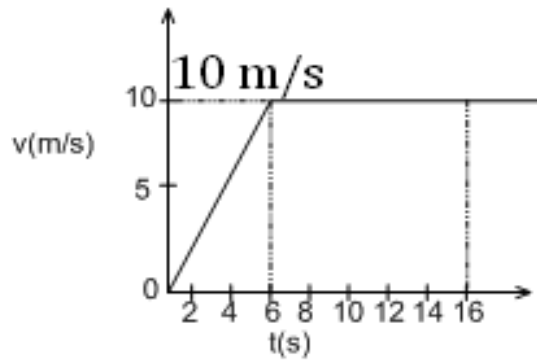
(ii) The velocity of a body in motion is recorded every second as shown calculate the –

Time (s)	0	1	2	3	4	5	6	7	8	9	10
Velocity (m/s)	60	54	48	42	36	30	24	18	12	6	0

(a) Acceleration (b) distance travelled and draw the graph.

(iii) The school of a boy from his home is 1 km to the east. When he reaches back home, he says that he had traveled 2 km distance but his displacement is zero. Justify your answer.

(iv) A car is moving with a uniform velocity of 10 m/s. The driver of the car decides to overtake the bus moving ahead of the car, so the driver of the car accelerates at 1 m/s^2 for 10 sec. Find the velocity of the car at the end of 10 sec also find the distance traveled by the car while accelerating.

(v) Name the 2 physical quantities which can be obtained from velocity-time graph.

(vi) Name the physical quantity which (a) remains constant (b) changes during uniform circular motion.

(vii) A body covered a distance of 110 meter along a semicircular path. Calculate the magnitude of displacement of the body, and the ratio of distance to displacement?

(viii) A train is travelling at a speed of 60 km/ h. Brakes are applied so as to produce a uniform acceleration of - 0.5 m /s^2. Find how far the train will go before it is brought to rest.

(ix) A Truck covers 30km at a uniform speed of 30km/hr. what should be its speed for the next 90km if the average speed for the entire journey is 60km/h?

(x) An object moves along a circular path of diameter 14cm with constant speed. If it takes 2 minute to move from a point on the path to the diametrically opposite point. Find –

(a) The distance covered by the object

(b) The speed

(c) The displacement

(d) Average velocity.

3. Revise Ch – 8: Motion.

CHEMISTRY WORKSHEET

CH-2: IS MATTER AROUND US PURE

1. Do the given worksheet in your note book.

Q1. State two reasons to justify that air is a mixture and water is compound.

Q2. Classify the following mixtures as homogeneous and heterogeneous.

 (i) Tincture of iodine   (ii) Sugar solution   (iii) Smoke   (iv) Brass

Q3. A solution of acetone contains 30 ml of acetone in 570 ml of water. Calculate the percentage concentration of the solute in the solution.

Q4. The concentration of a salt solution in terms of mass by mass percentage is 20 and the mass of the solution is 550 g. Determine the mass of solute present in the solution.

Q5. Fine beam of light entering through a small hole in a dark room, illuminates the particles in its path. Name the process associated and explain.

Q6. Distinguish among soda water, milk and muddy water in a tabular form under the following heads:

(i) Stability   (ii) Filterability

(iii) Type of mixture   (iv) Tyndall effect

Q7. (a) What is solute and solvent in aerated drinks?

(b) Given a solution of substance 'A' how will you test whether it is saturated or unsaturated with respect to 'A' at the given temperature?

Q8. Classify the following into physical or chemical change:

(i) Burning of a candle   (ii) Tarnishing of silver spoon

(iii) Fading of clothes   (iv) Mixing of iron filings and sand

(v) Sublimation of iodine   (vi) Electrolysis of water

Q9. Distinguish between elements and compounds with one example of each.

Q10. Elements are classified as metals, non-metals and metalloids. Give any one property of each. Also give one example of each.

2. Do the following practicals in your Lab manual.

1. Preparation of:

(a) a true solution of common salt, sugar and alum

(b) a suspension of soil, chalk powder and fine sand in water

(c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of

• transparency

• filtration criterion

• stability

2. Preparation of

(a) A mixture

(b) A compound

using iron filings and sulphur powder and distinguishing between these on the basis of:

(i) appearance, i.e., homogeneity and heterogeneity

(ii) behaviour towards a magnet

(iii) behaviour towards carbon disulphide as a solvent

(iv) effect of heat

3. Perform the following reactions and classify them as physical or chemical changes:

(a) Iron with copper sulphate solution in water

(b) Burning of magnesium ribbon in air

(c) Zinc with dilute sulphuric acid

(d) Heating of copper sulphate crystals

(e) Sodium sulphate with barium chloride in the form of their solutions in water.

3.Revise Ch-2: Is Matter Around Us Pure.

BIOLOGY WORKSHEET

CHAPTER- 1: CELL

A.   Give reasons, why.

1. Raisins and dry apricots swell up when placed in a bowl containing water for some time.

2. Chromatin, chromatid and chromosomes are related to each other.

3. Lysosomes are known as ' scavengers of the cells'.

4. Plant cells possess large sized vacuole.

5. Roots of plants have mostly leucoplasts in them than chloroplasts.

B.   Name the organelles which show the analogy written as under.

1. Transporting channels of the cells.	_____.
2. Digestive bag of the cell.	_____.
3. Storage sacs of the cells.	_____.
4. Control room of the cell.	_____.
5. Kitchen of the cell.	_____.
6. Powerhouse of the cell.	_____.
7. Packing & dispatching unit of the cell.	_____.

C.   Multiple choice questions.

1. Select the odd one out

   a. Membranes are made of organic molecules like proteins and lipids.

   b. Molecules soluble in organic solvents can easily pass through membranes.

   c. Plasma membranes contain chitin sugar in plants.

d. Movement of water across a semipermeable membrane is affected by the amount of substances dissolved in it.

2. Cell organelles without a cell membrane are

   a. Nucleus

   b. Chloroplasts

   c. Ribosomes

   d. Golgi apparatus

3. The proteins essential for building the cell membrane are manufactured by

   a. Rough endoplasmic reticulum

   b. Plasma membrane

   c. Mitochondria

   d. Golgi apparatus

4. Silver nitrate solution is used to study

   a. Endoplasmic reticulum

   b. Nucleus

COMPUTER

1. Make a PPT on Communication Skills & Self-Management Skills (Atleast 12 Slides)

2. Make a Project on Computer Networks

- Use of Computer Networks

- Types of Computer Networks

- Transmission Media