



SUMMER HOLIDAY HOMEWORK

CLASS - X

(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)

MESSAGE FOR STUDENTS

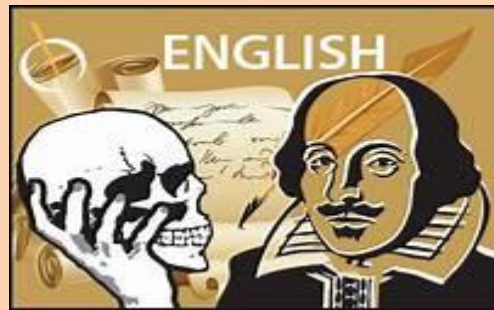
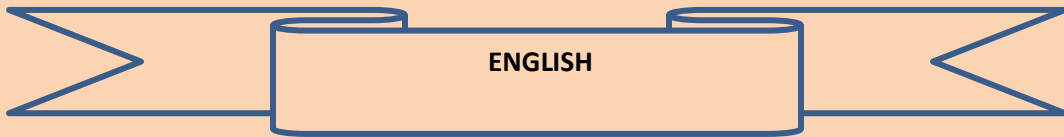
Dear Students,

- ✚ 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,

Your Teacher



1. Draft a poster on LAUGHTER: THE BEST THERAPY.

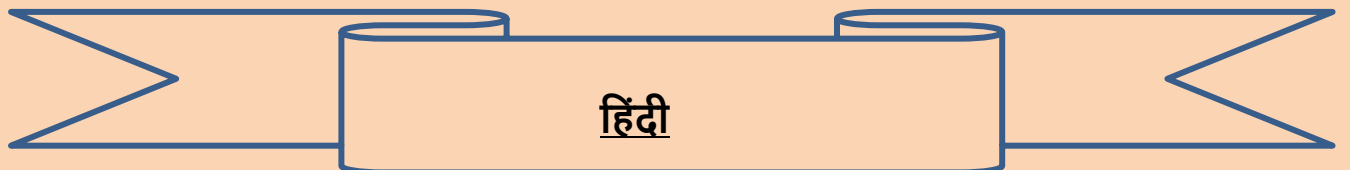
2. a) Social networking sites have become the latest fad for school going children. The craze has a very bad impact on the youngsters. Considering its gravity you want to express your concern.

Write a letter to the Editor of Hindustan Times in 100 to 120 words. Sign yourself as Nutan /Nitin of H.no 120 /3B Sant Nagar, Delhi.

b) A special weekly supplement on Health and Hygiene has recently been launched by the daily newspaper that you get at home. The articles in that supplement cater to all age groups of people. Everyone finds it very beneficial.

Write a letter to the Editor of that newspaper thanking him /her for it and also congratulate him/her on its success. Sign yourself as Radhika /Ramana living at 6D Kedar Apartments, Rohini sector- 9, Delhi.

3. Revise the entire syllabus done so far.



❖ मीराबाई के साहित्यिक योगदान पर एक परियोजना कार्य (प्रोजेक्ट) निम्न बिंदुओं के आधार पर तैयार कीजिए –

- जीवन परिचय
- प्रमुख कृतियाँ
- काव्यगत विशेषताएँ
- भाषा शैली
- मीराबाई द्वारा रचित ग्रंथ

❖ "बड़े – बुजुर्गों के सम्मान पर आधारित एक स्वरचित कविता लिखिए।

❖ "एक भारत श्रेष्ठ भारत "पर पाँच नारे लिखिए और एक सुंदर पोस्टर बनाइए। (A3 साइज़ शीट पर)

❖ "एंटीबायोटिक्स बैक्टीरिया को मारकर या क्षति पहुँचा कर बीमारी का इलाज करते हैं। "

किन्हीं पाँच प्राकृतिक एंटीबायोटिक्स (जैसे लहसुन ,शहद ,अजवाइन ,जैतून ,हल्दी ,अदरक ,नीम आदि) के बारे में जानकारी एकत्र कीजिए और उनके क्या-क्या गुण हैं, लिखिए।

*निम्नलिखित में से किन्हीं दो विषयों पर संकेत बिंदुओं के आधार पर 100 से 150 शब्दों में अनुच्छेद लिखिए-

क) आदर्श विद्यार्थी

संकेत बिंदु -* विद्यार्थी का अर्थ

- आदर्श विद्यार्थी का स्वरूप
- आदर्श विद्यार्थी के गुण/ लक्षण

ख) हिंदी हमारी पहचान

संकेत बिंदु: -*हिंदी का सम्मान

- संपर्क भाषा के रूप में प्रयोग
- हिंदी का भविष्य

ग) प्रदूषण की समस्या

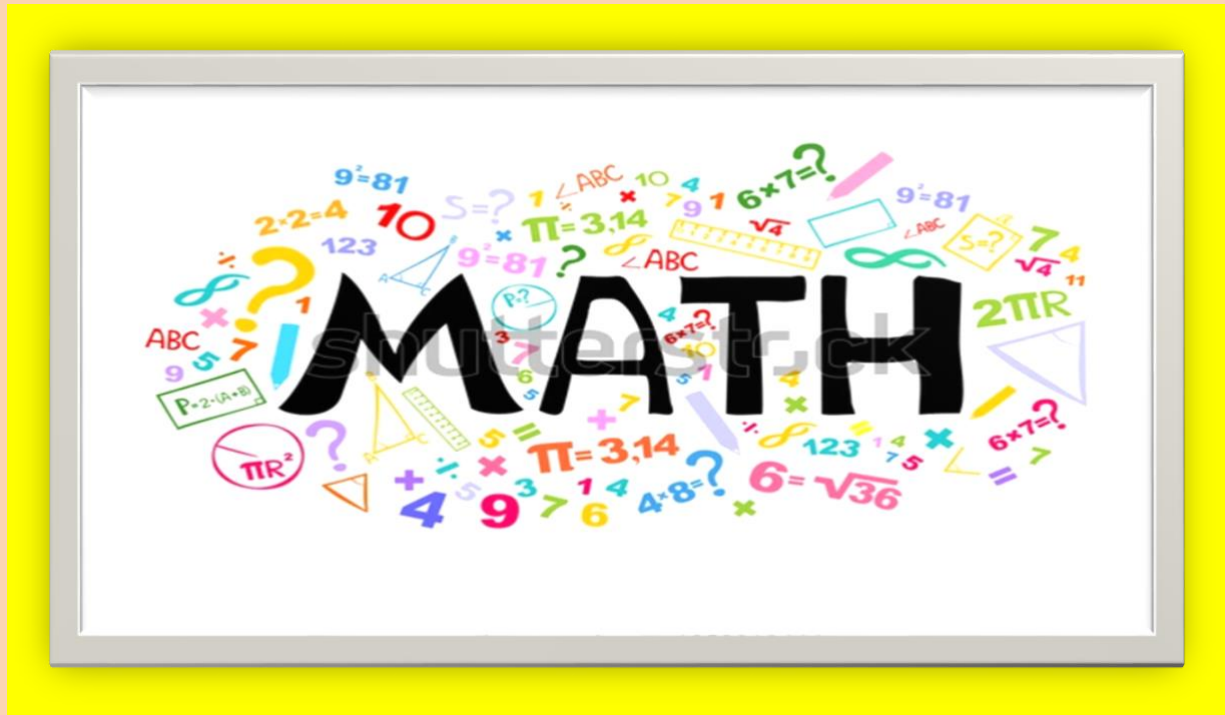
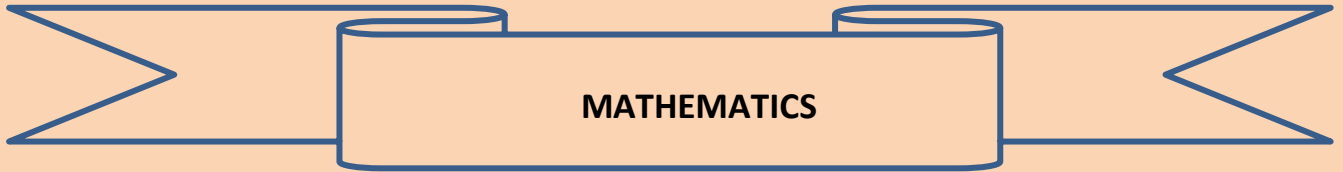
संकेत बिंदु: -* समस्या का स्वरूप

*प्रदूषण के कारण

- * प्रदूषण का दुष्प्रभाव
- * प्रदूषण रोकने के उपाय

नोट:-* गृहकार्य को करते समय भाषा ,लेख एवं वर्तनी की शुद्धता का विशेष ध्यान रखिए ।

*अपने गृहकार्य को कलात्मक बनाने के लिए ए-4 साइज़ शीट या स्क्रेप फाइल ,रंगीन पेन और चित्रों का यथासंभव प्रयोग कीजिए ।



*Dear Students Learning is the beginning of wealth.
Learning is the beginning of health.
Learning is the beginning of spirituality
Searching and learning is where the miracle process all begins.
... .. Jim Rohn*

Holiday is the time that we all eagerly wait for. We all make plans to enjoy, to relax and to empower ourselves during these gala days. This summer vacation the Holiday Homework so designed by the mentors of the school is a medium for you all to achieve the motto of “Fun and Learn” The activity based assignments will foster curiosity, develop creativity , enhance knowledge and instill the joy of learning among you all. They will certainly help you discover a new you who is more enriched and confident and performs every action to perfection. As it is well recognized that “ **ORLEANS- THE SCHOOL** “not only focuses on academics but lay equal importance on Co-scholastic Competencies.

- **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 draw the graph of a quadratic polynomial and observe shape of curve and number of zeroes.

ACTIVITY 2. LINEAR EQUATIONS: to obtain the conditions for two lines of a system of linear equation in two variable to be intersecting, parallel or coincident.

ACTIVITY 3. QUADRATIC EQUATIONS: to find experimentally the positive root of a quadratic equation of type ax^2+bx-c

ACTIVITY 4. A.P : to verify if a given sequence is A.P or not.

- **ASSIGNMENT WORK**

Do this assignment in homework notebooks.

Make a working model demonstrating that the path of light is rectilinear using house waste material.

2. Do the following questions in your note book.

Q (i) The focal length of a spherical mirror is 15 cm. It formed 3 times magnified real image of an object. (a) Identify the mirror. (b) Calculate the image distance from mirror. (c) Draw the ray diagram of above situation.

Q (ii) Light travels from rarer medium 1 to a denser medium 2. The angle of incident and refraction are respectively 45° and 30° . Calculate the (a) refractive index of second medium with respect to the first medium and (b) refractive index of medium 1 with respect to the medium 2.

Q (iii) The refractive index of glass is 1.6 and that of diamond is 2.4. Calculate (a) refractive index of diamond with respect to glass and (b) refractive index of glass with respect to diamond.

Q (iv) A convex lens of focal length 10 cm is placed at a distance of 12 cm from a wall. How far from the lens should an object be placed so as to form its real image on the wall?

Q (v) Determine how far an object must be placed in front of a converging lens of focal length 10 cm in order to produce an erect image of linear magnification 4.

3. Revise Ch – 10: Light

4. Do the following practicals in your Lab manual.

(i) Determination of the focal length of: a) Concave mirror b) Convex lens by obtaining the image of a distant object.

(ii) Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.

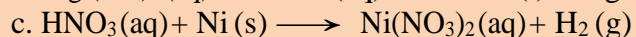
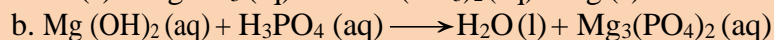
(iii) Tracing the path of the rays of light through a glass prism.

CHEMISTRY WORKSHEET

CH-1: CHEMICAL REACTIONS AND EQUATIONS

1. Do the given worksheet in your note book.

Q1. Balance the following chemical equations:



Q2. Write the skeleton equation for each of the following reactions. Then balance each of the following chemical equations.

a. Hydrogen + Oxygen \longrightarrow Water

b. Potassium iodide + Chlorine \longrightarrow Potassium chloride + Iodine

c. Aluminum chloride + Sodium carbonate \longrightarrow Aluminum carbonate + Sodium chloride

d. Copper + Oxygen \longrightarrow Copper(II) Oxide

e. Zinc sulphate + Strontium chloride \longrightarrow Zinc chloride + Strontium sulphate

Q3. Indicate which type of chemical reaction (Combination, decomposition, displacement, double displacement or combustion) is being represented in the following reactions:

a. $\text{Na}_3\text{PO}_4 + 3 \text{KOH} \longrightarrow 3 \text{NaOH} + \text{K}_3\text{PO}_4$

b. $\text{MgCl}_2 + \text{Li}_2\text{CO}_3 \longrightarrow \text{MgCO}_3 + 2 \text{LiCl}$

c. $\text{C}_6\text{H}_{12} + 9 \text{O}_2 \longrightarrow 6 \text{CO}_2 + 6 \text{H}_2\text{O}$

d. $2 \text{AgNO}_3 + \text{Cu} \longrightarrow \text{Cu}(\text{NO}_3)_2 + 2 \text{Ag}$

e. $2 \text{NO}_2 \longrightarrow 2 \text{O}_2 + \text{N}_2$

Q4. Differentiate between:

a. Combination and Decomposition reaction.

b. Oxidation and Reduction reaction.

c. Balanced and unbalanced chemical equation.

Q5. $\text{Fe}_2\text{O}_3 + 3 \text{CO} \longrightarrow 2 \text{Fe} + 3 \text{CO}_2$

Study the above reaction and name the following:

a. Substance getting reduced

b. Substance getting oxidised

c. Oxidising agent

d. Reducing agent

Q6. Give reasons for the following:

a. Silver Nitrate solution cannot be stored in Copper containers.

b. Blue colour of copper sulphate solution starts fading when a zinc rod is dipped in it.

c. Photo chemical decomposition reaction finds application in photography.

Q7. Give examples for the following:

a. Precipitation reaction.

b. Thermal decomposition.

c. Exothermic reaction.

2. Do the following practicals in your Lab manual.

1 A. Finding the pH of the following samples by using pH paper/universal indicator:

(i) Dilute Hydrochloric Acid

(ii) Dilute NaOH solution

- (iii) Dilute Ethanoic Acid solution
- (iv) Lemon juice
- (v) Water
- (vi) Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:

- (a) Litmus solution (Blue/Red)
- (b) Zinc metal
- (c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into:

A. Combination reaction

B. Decomposition reaction

C. Displacement reaction

D. Double displacement reaction

(i) Action of water on quicklime

(ii) Action of heat on ferrous sulphate crystals

(iii) Iron nails kept in copper sulphate solution

(iv) Reaction between sodium sulphate and barium chloride solutions.

3. Revise the entire syllabus done so far.

BIOLOGY WORKSHEET

CHAPTER – 6: LIFE PROCESSES

SECTION A

(A) Multiple Choice Questions

Q1. Products of anaerobic respiration in muscles are

- a.** Lactic acid and energy
- b.** Lactic acid ,carbon dioxide and energy
- c.** Lactic acid ,water ,carbon dioxide and energy
- d.** Lactic acid , water , and energy

Q2. Which of the following statements are true about respiration?

- a.** During inhalation , ribs move inward and diaphragm is raised
- b.** In alveoli exchange of gases takes place i.e oxygen from blood into alveolar air
- c.** Hemoglobin has greater affinity for carbon dioxide than oxygen

d. Alveoli increase the surface area for absorption of gases

- i. a & d ii. b & c iii. a & c iv. b & d

Q3. The main function of the urinary bladder is to

- a.** control the pressure of urine in the urinary bladder
- b.** take the urine from the kidney to the urinary bladder
- c.** filter blood and remove the urine
- d.** connect the parts of the excretory system

(B) Assertion and Reasoning

Direction: in the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

- a. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)**
- b. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A)**
- c. Assertion (A) is true but reason(R) is false**
- d. Assertion (A) is false but reason(R) is true**

Q4. Assertion: aerobic respiration requires less energy as compared to anaerobic respiration.

Reason: Mitochondria is the power house of the cell.

Q5. Assertion: human heart is four chambered.

Reason: vena cava is the only artery that supplies deoxygenated blood to the heart

Q6. Assertion: energy is required to carry on different life processes.

Reason: energy is obtained in the form of ATP in mitochondria

SECTION B

Q7. Name the following:

- a.** The process in plants that links light energy with chemical energy
- b.** Organisms that can prepare food on their own
- c.** The cell organelle where photosynthesis occurs

- d. Cells that surround the stomatal pore
- e. Organisms that cannot prepare their own food
- f. An enzyme secreted from the gastric glands in the stomach that acts on proteins

Q8. How are alveoli designed to maximize the exchange of gases?

Q9. Answer as directed

- a. Write two water conducting tissues present in plants? How does water continuously enter into the root system?
- b. Explain why plants have low energy needs as compared to animals

Q10. Answer as directed

- a. What is peristalsis?
- b. What will happen if the diaphragm of a person will get ruptured in an accident?

Q11. How is aerobic respiration different from anaerobic respiration?

SECTION C

Q12. Describe the processes of urine formation in the kidneys.

Q13. Draw a sectional view of the human heart and label the following

- a. The chamber of the heart that pumps out deoxygenated blood
- b. The blood vessel that carries away oxygenated blood from the heart
- c. The blood vessel that receives deoxygenated blood from the lower part of our body
- d. Part that prevents the backward flow of blood



Shall I compare thee to a summer's day? Thou art more lovely and more temperate. Rough winds do shake the darling buds of May, And summer's lease hath all too short a date. Sometime too hot the eye of heaven shines, And often is his gold complexion dimmed; And every fair from fair sometime

declines, By chance, or nature's changing course, untrimmed; But thy eternal summer shall not fade, Nor lose possession of that fair thou ow'st, Nor shall death brag thou wand'rest in his shade, When in eternal lines to Time thou grow'st. So long as men can breathe, or eyes can see, So long lives this, and this gives life to thee.

A. Prepare a project on any one of the following topics; (i) Tsunami (ii) Safer Constructive Practices (iii) Survival Skills (iv) Alternative communication systems during disasters (v) Sharing responsibility Keep the following points in mind while making the project report: (a) Number of pages 15-20 (b) Illustrate with the help of maps, pictures and diagrams (c) Bind your project in a simple folder

B. Answer the following questions:

1. What is a Resource?
2. What is Sustainable Development?
3. Classification of resources: • On the basis of origin • On the basis of exhaustibility • On the basis of ownership • On the basis of status of development
4. Write about the first Earth summit.
5. Write about Agenda-21.
6. Expand UNCED.
7. What are the three steps involved in resource planning in India?
8. Define the following: 1. Bangar 2. Khaddar 3. Bhabar 4. Terai 5. Reh / kallar
9. On an outline physical map of India mark and label: MAJOR SOIL TYPES (Textbook page no: 9) \
10. What is National Income?
11. What is meant by Per capita income?
12. What is Human Development?
13. What is Human Development Index?
14. What is meant by Economic Growth and Economic Development?
15. Expand UNDP, WDR , IMR , NAR , PDS and HDI.
16. What is Infant Mortality Rate?
17. What is Literacy rate?
18. What is Net Attendance Ratio?

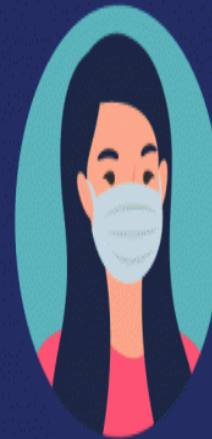
HELP STOP COVID-19



Get a
COVID-19
vaccine



Wash
your
hands
often



Cover your
mouth and
nose with
a mask

Avoid crowds and practice
social distancing



Maintain distance



Report Fraudulent COVID-19
Tests, Vaccines and Treatments



Donate
Blood
and
Plasma