



Yuvashakti Model School

— **इहोक्तेहा अरु इण्देकरोति** —

RAMA VIHAR, DELHI - 110081

(Affiliated to CBSE and Recognised by Directorate of Education)

**SUMMER VACATION
HOLIDAY'S HOME WORK
FOR
SESSION (2023-24)**

CLASS - X



Social Science

1. Make an attractive poster on the topic 'How to handle peer pressure to tackle addictions'
2. Make one project on the topics given below:-
 - a. Social Issues
 - b. Consumer awareness
 - c. Sustainable Development
3. Do the following pages in Social Science Lab Manual:-
5,6,7,8,27,28,29,30,31,32,33,34,35,36,54,55,56, 57,58,59,60,61, 76,77,78.
4. Do the following pages in Map practice book:-
9,11,13,15,17,19,21,23,25,27,29,31,35,37,67,69 and 71.
5. Complete and learn all the syllabus done till now.
6. Worksheets of each chapter will be provided during vacation on what's app group, do all worksheets in your registers.

G.K

Instructions

Use waste material to prepare models and charts

- 1) Make a chart/model proper disposal of waste.(roll no 1 to 12)
- 2) Make a chart showing the achievement of sports person who have physical disabilities write about their achievements in two three lines.(roll no 13 to 24)
- 3) Make a wall hanging/model showing the way to save environment.(roll no 25 to 36)
- 4) Make a chart on the women scientist who have contributed in Mangal mission by ISRO.(roll no 37 to 48)
GK book -page no 10 to 30

ENGLISH

- 1 . You, a resident of Patel Nagar Delhi, have witnessed an accident happening right in front of you ,where a school bus hit a two- wheeler . You got the shock of your life to see this careless and unkind act of the school bus driver. Write a letter to the editor bringing such gruesome acts to notice of concerned authorities.
2. You are. Nikhil/ Neelam the librarian of ABC school place an order with Utopia Book Store to send you books as per the list provided for the school library. Also request. The Manager ,book store , to give you a discount as discussed in a meeting with their representative.
3. Write an article in 100- 120 words on the topic appropriate use of Mobile phones. You are Vasu/Vani

4. Education should be skilled based rather than just acquiring a degree acquiring. A degree leads to chasing the dreams of a white collar job pursuing any other profession has looked down upon. Write a paragraph on importance of skill based education.

5. Delhi is the capital of India. People from all partsthe country and world come to visit Delhi. Theremany historical buildings here. Last year, I.....Delhi I also watchedcommon Wealth Games.

6. If you were the family member of the young Seagull,would you also decide not to go near him?

7. What do you think would happen to Tricky after he went back to Mrs Pumphery?

8. Who was Hodgkin? How was according to Mrs Pumphery,he responsible for Tricky's ailment.

NOTE - Complete English notebook.

- Prepare syllabus of UT 1

हिन्दी

पाठ्य पुस्तक स्पर्श के आधार पर निम्नलिखित प्रश्नों के उत्तर दीजिए ।

प्रश्न 1 कबीर की सभी साखियों की व्याख्या अपनी उत्तर पुस्तिका में कीजिये ।

प्रश्न 2 मीरा के पदों की व्याख्या कीजिये ।

प्रश्न 3 प्रेमचंद की कहानी बड़े भाई साहब का सार लिखिए ।

प्रश्न 4 लीलाधर मंडलोई ततारा वामीरो कथा का सार लिखिए ।

प्रश्न 5 डायरी गद्य विधा है। इसमें दैनिक जीवन में होने वाली घटनाओं, अनुभवों को वर्णित किया जाता है। आप भी अपनी दैनिक जीवन से सम्बन्धित घटनाओं को डायरी में लिखने का अभ्यास करें ।

प्रश्न 6 परियोजना कार्य कीजिये ।

स्वतन्त्रता आन्दोलन में अनेक महिलाओं ने योगदान दिया था। इन महिलाओं के बारे में जानकारी लिखें ।(फ़ाइल के हर पेज पर चित्र का इस्तेमाल कीजिए)

व्याकरण के आधार पर निम्नलिखित प्रश्नों के उत्तर दीजिए ।

प्रश्न 1 पदबंध किसे कहते हैं? पदबंध के कितने भेद होते हैं ?उदाहरण सहित समझाइए

प्रश्न 2 समास किसे कहते हैं ?समास के कितने भेद होते हैं ?उदाहरण सहित समझाइए ।

प्रश्न 3 मुहावरों से आप क्या समझते हैं ?पाठ्यपुस्तक व्याकरण में से किन्ही 40 मुहावरों को लिखकर वाक्य में प्रयोग कीजिए ।

प्रश्न 4 निम्नलिखित विषयों में से किसी दो पर अनुच्छेद लिखिए ----

1. ग्लोबल वार्मिंग के खतरे
2. विद्यार्थी और अनुशासन

3 .इंटरनेट : एक संचार क्रांति

4 .स्वाध्याय के लाभ

प्रश्न 5 सरल वाक्य, संयुक्त वाक्य और मिश्र वाक्य से आप क्या समझते हैं ? प्रत्येक के पांच उदाहरण कॉपी में लिखिए।

प्रश्न 6 आपकी कॉलोनी में जगह-जगह कूड़े के ढेर हैं नगर निगम अधिकारी को पत्र लिखिए।

अथवा

किसी दैनिक समाचार- पत्र के संपादक को शहर में बढ़ती जा रही बस दुर्घटनाओं पर चिंता प्रकट करते हुए पत्र लिखिए।

MATHEMATICS

Holiday Home work

All questions are compulsory. Do all in your homework notebook.

Revision Sheet

Some Suggestion from teacher's desk:

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.

Holiday is time to explore the world beyond text books and mundane theories..... there is a mathematician within you. Application of the concept so taught can be done in an enjoyable manner. Open your wings and explore the world unknown, unseen and undiscovered..... all the best!

Real Number

1. The LCM and HCF of two numbers are 675 and 45. If one of the number is 135, then find the other number.
2. Can the number 4^n , n be a natural number end with the digit 0? Give reason.
3. Explain why $3 \times 5 \times 7 + 7$ is a composite number
4. Find HCF and LCM of 30, 72 and 432 by prime factorization.
5. Show that $5 - \sqrt{3}$ is an irrational number if $\sqrt{3}$ is an irrational number.
6. Find the largest positive integer that will divide 398, 436 and 542 leaving remainder 7, 11 and 15 respectively.

Pair of linear Equation In two variables

7. Solve the following pair of linear equation.

i. $2x - y = 5$	$3x + 2y = 11$
ii. $2x - 3y = 7$	$x + y = 1$
iii. $\frac{x+1}{2} + \frac{y-1}{3} = 8$	$\frac{x-1}{3} + \frac{y+1}{2} = 9$
iv. $43x - 37y = 31,$	$13x + 23y = -59$
v. $47x + 31y = 63$	$31x + 47y = 15$
vi. $217x + 131y = 913$	$131x + 217y = 827$
vii. $97x + 103y = 303$	$103x + 97y = 297$
viii. $149x - 330y = -511$	$-330x + 149y = -32$
ix. $99x + 101y = 499$	$101x + 99y = 501$
x. $37x + 41y = 70$	$41x + 37y = 8$

8. Solve the following Word problem.

a. Ram is three times as old as Shyam. Five years 'after, Ram will be two and a half times as old as Shyam. Find ages of Ram and Shyam.

[45years,

15years]

b. Two years ago, a father was five times as old as his son. Two years later his age will be 8 more than three times the age of the son. Find the present ages of father and son.

[42years,

10years]

c. The sum of ages of father and his son is 65 years and twice the difference of their age is 50 years, find the age of father.

[45 years]

d. Five years ago A was 5 times as old as B. 3 years later A will be 3 times as old as B. find their present ages.

[45

years , 13 years]

e. The sum of the digits of two digit number is 15. The number obtained by interchanging the digits exceeds the given number by 9. Find the number. [78]

f. The sum of two digit number is 8. If their sum is four times their Difference, find the numbers.

[5 and 3]

g. In a two digit number, the tens digit is three times the ones digit. When the number is decreased by 54, digits are reversed. Find the number. [93]

h. A two digit number is obtained by either multiplying the sum of the digits by 8 or adding 1, or by multiplying the difference of the digit by 13 and adding 2. Find the number. How many such numbers are there? [41]

i. The sum of a two digit number and the number formed by interchanging its digit is 110. If 10 is subtracted from the first number, the new number is 4 more than 5 times the sum of the digits in the first number. Find the first number.

[64]

- j. A fraction becomes $\frac{4}{5}$ if 1 is added to each of the numerator and denominator, however, if we subtract 5 from each, the fraction become $\frac{1}{2}$. Find the fraction. [7/9]

Quadratic Equation

Solve the following equation

- a. $2x^2 - 11x + 12 = 0$ [Ans :- 4 , 3/2]
 b. $3x^2 - 14x - 5 = 0$ [Ans :- 5 , -1/3]
 c. $\sqrt{3}x^2 + 10x + 7\sqrt{3} = 0$ [Ans :- $-\frac{7}{\sqrt{3}}$, $-\sqrt{3}$]
 d. $\sqrt{3}x^2 + 11x + 6\sqrt{3} = 0$ [Ans :- $-3\sqrt{3}$, $-2/\sqrt{3}$]
 e. $4x^2 - 4a^2x + (a^4 - b^4) = 0$ [Ans :- $\frac{1}{2}(a^2 - b^2)$, $\frac{1}{2}(a^2 + b^2)$]
 f. $\frac{x+1}{x-1} + \frac{x-2}{x+2} = 3$ [Ans :- -5 , 2]
 g. $\frac{x-1}{x-2} + \frac{x-3}{x-4} = \frac{10}{3}$ [Ans :- 5 , 5/2]
 h. $\frac{1}{a+b+x} = \frac{1}{a} + \frac{1}{b} + \frac{1}{x}$ [Ans :- -a , -b]
 i. $\frac{2x}{x-3} + \frac{1}{2x+3} + \frac{3x+9}{(x-3)(2x+3)} = 0$ [Ans :- -3/2 , -1]

Solve the following word problems

- The difference of two number is 5 and the difference of their reciprocal is $\frac{1}{10}$ Find the numbers(Ans -: 5,10)
- In a cricket match Kumble took three wicket less than twice the number of wicket taken by Srinath. The product of the number of wickets taken by these two is 20, find the number of wickets taken by each. (Ans -: Srinath's wicket =4 , Kumble's wickets = 5)
- Out of group of swans, $\frac{7}{2}$ times the square root of the total number are playing on the shore of a pond. The two remaining ones are playing, with amorous fight, in the water. What is the total number of swans? (Ans -: 16)
- A two digit number is such that he product of digit is 20. When 9 is added to the number then the digits interchange their places. Find the number. (Ans -: 45)
- A two digit number is such that the product of its digits is 35, when 18 is added to the number, the digit interchange their places. Find the number. (Ans -: 57)
- The numerator of a fraction is 3 less than the denominator. If 2 is added to the both numerator as well as denominator, then the sum of the new and original fraction is $\frac{29}{20}$. Find the fraction. (Ans -: $\frac{7}{10}$)
- The numerator of a fraction is 2 less than the denominator. if 1 is added to both numerator and denominator the sum of the new and original

Fraction is $\frac{19}{15}$. Find the original fraction. (Ans -: $\frac{3}{5}$)

8. A person on tour has Rs 360 for his daily expense. If he exceeds his tour programme by four days. He must cut down his daily expense by Rs. 3/day. Find the number of days of his tour programme. (Ans -: 20days)
9. By the reduction of Rs.1 per kg in the price of sugar Mohan can buy one kg sugar more for Rs. 56. Find the original price of sugar per kg. (Ans -: Rs . 8 /kg)
10. In the Centre of a rectangular lawn of dimensions 50m x 40m, a rectangular pond has to be constructed so that the area of the grass surrounding the pond would be 1184 m². Find the length and breadth of the pond.
11. An aero plane left 30minutes later than its scheduled time, and in order to reach its destination 1500km away in time, it has to increase its speed by 250km/hr from its usual speed. Determine its usual speed. [Ans -: 750km/hr]
12. Seema can row her boat at a speed of 5km /hr in still water. if its takes her 1 hour more to row the boat 5.25 km upstream than to return downstream, find speed of the stream. [ans -: 2km/h]

Polynomials

1. Find the zero of the polynomial $6x^2 - 13x + 6$ and verify the relation between the zeroes and its coefficients.
2. Find the zeroes of the quadratic polynomial $4x^2 - 9$ and verify the relation between the zeroes and its coefficients.
3. Find the zeroes of the quadratic polynomial $9x^2 - 5$ and verify the relation between the zeroes and its coefficients.
4. form a quadratic polynomial whose zeroes are -3 and 5
5. Form a quadratic polynomial whose zeroes are $\frac{-1}{2}$ and $\frac{2}{3}$
6. If α and β are the zeroes of $x^2 + 7x + 12$, find the value of $\frac{1}{\alpha} + \frac{1}{\beta} + 2\alpha\beta$
[Ans -: $\frac{281}{12}$]
7. Find the zero of the quadratic polynomial $2x^2 - 25$. [Ans -: $\pm \frac{5}{\sqrt{2}}$]
8. Find a quadratic polynomial whose zeroes are $3 + \sqrt{5}$ and $3 - \sqrt{5}$
9. If α and β are the zero of quadratic polynomial $x^2 - (k + 6)x + 2(2k - 1)$. Find k if $\alpha + \beta = \frac{1}{2}\alpha\beta$ [Ans -: k = 7]
10. Find the zero of the quadratic polynomial $\sqrt{3}x^2 - 8x + 4\sqrt{3}$ [Ans -: $2\sqrt{3}$ and $2/\sqrt{3}$]
11. If α and $\frac{1}{\alpha}$ are the zero of the quadratic polynomial $4x^2 - 2x + (k - 4)$, find k [Ans -: k = 8]

12. If α , and β are the zeroes of the quadratic polynomial $x^2 - (k + 6)x + 2(2k - 1)$.

Find k if $\alpha + \beta = \frac{1}{2}\alpha\beta$

13. Find the zeroes of the quadratic polynomial $\sqrt{3}x^2 - 8x + 4\sqrt{3}$.

Make an attractive project on the basis of the following.

- a) Pie (Π) (Roll - No. 1 to 10)
 - b) Polynomials (Roll - No. 11 - 20)
 - c) Pair of linear equations in two variables) (Roll No. 21 - 30)
 - d) Quadratic Equation (Roll No. 31 to 40)
-

SCIENCE

PHYSICS

Q1. List two differences between real image and virtual image.

Q2. Draw a ray diagram to describe the nature position and size of image formed by (a) convex lens for object at 2F (b) concave mirror for object between F and 2F

Q3. Define focal length of a concave lens .Draw diagram to show it .A needle is placed 45 cm from a lens and forms an image on the screen placed 90 cm on other side of convex lens. Find its focal length and power .What is the height of the image if height of the needle is 5 cm.

Q4. A lens X has focal length 20 cm and lens Y has focal length 40 cm which lens would you select to obtain a more convergent beam of light and why?

Q5. If image formed by a lens for all positions of objects placed in front of it is always virtual, erect and diminished, state the type of lens. If focal length of such a lens is 20 cm find its power. Draw a ray diagram to show image formation.

Q6. An object is placed at a distance of 30 cm in front of a convex mirror of focal length 15 CM. Write four characteristics of image formed by the mirror.

BIOLOGY

Q1. Why do we get muscular cramps after heavy exercise?

Q2. What is double circulation in human beings? Why is it necessary?

Q3 Small intestine in herbivores is longer than in carnivorous. Why?

Q4. Two plants are kept in cylinders which do not have any oxygen. One plant is kept in a dark room while other is in sunlight. Which plant will survive and why?

Q5. What will happen if mucus is not secreted by the gastric glands?

Q6 How does aerobic respiration differ from anaerobic respiration?

Q7 Why do fishes die when taken out of water?

Q8 .why is transpiration important for plants?

Q9 How do carbohydrates proteins and fats get digested in human beings?

Q10. Why do veins have thin walls as compared to arteries?

Do above given assignment questions in notes copyComplete your lab manual