



JKG INTERNATIONAL SCHOOL

(Affiliated to CBSE, Delhi. School Code No. 2130679/60305)
Shakti Khand-II, Indirapuram, Ghaziabad- 201012

Summer Holiday Home Work 2021-22

Class X

English

As per the CBSE guidelines, you have to prepare a portfolio. Do the following activities.

- + Draw the mind map of any chapter of your choice from **first flight or foot prints without feet**.
- + Compare and contrast the character sketch of any one of the following: (through Portrait): (a) Lencho and postmaster (b) Anil and Hari Singh

Biology

Draw the human digestive system and make a flowchart to explain the digestive system.

Physics

Correlate voltage and current across a resistance using a different number of batteries/cell and plot a graph between V-I graph and determine the resistance of wire and write the law which involve in this process

Chemistry

Draw a flowchart to show different types of chemical reactions. Write their definition and give example of each in a drawing form.

हिंदी

तेनालीराम के वाक्चातुर्य से संबंधित किसी एक किस्से पर एक कॉमिक तैयार कीजिए

S.ST

Prepare the project on any one of the following:

- + Consumer Awareness
- + Social Issues
- + Sustainable Development

Math

Do the worksheet attached.

IT

Do the attached worksheet. (All the questions should be done in IT register only)

Mathematics Worksheet:

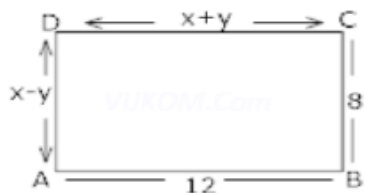
Chapter -2 Polynomials

- Q1. Find the value of k such that $3x^2 + 2kx + x - k - 5$ has the sum of zeroes as half of their product.
- Q2. If α and β are zeroes of $x^2 - x - 2$, find a polynomial whose zeroes are $(2\alpha + 1)$ and $(2\beta + 1)$.
- Q3. Find values of a and b so that $x^4 + x^3 + 8x^2 + ax + b$ is divisible by $x^2 + 1$.
- Q4. What real number should be subtracted from the polynomial $3x^3 + 10x^2 - 14x + 9$, so that the polynomial $(3x-2)$ divides it exactly?
- Q5. If α and β are the zeroes of the polynomial $x^2 - 5x + m$ such that $\alpha - \beta = 1$, find m .
- Q6. If the sum of squares of zeroes of the polynomial $x^2 - 8x + k$ is 40, find the value of k .
- Q7. Write a quadratic polynomial, the sum of whose zeroes is -3 and their product is also -3 .
- Q8. If α and β are zeroes of the polynomial $t^2 - t - 4$, form a quadratic polynomial whose zeroes are $\frac{1}{\alpha}$ and $\frac{1}{\beta}$.
- Q9. A person distributes k books to some needy students. If k is a zero of the polynomial $x^2 - 100x - 20000$, then find the number of books distributed.
- Q10. Show that 3 is a zero of the polynomial $2x^3 - x^2 - 13x - 6$. Hence find all the zeroes of this polynomial.

Chapter - 3

Linear Equations in two Variables

- Q1. If the lines given by $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are parallel, then find value of k .
- Q2. Find the value of c for which the pair of equations $cx - y = 2$ and $6x - 2y = 3$ will have infinitely many solutions.
- Q3. Find the co-ordinate where the line $x - y = 8$ will intersect y-axis.
- Q4. If $x = a$, $y = b$ is the solution of the pair of equation $x - y = 2$ and $x + y = 4$, then find the value of a and b .
- Q5. Find the values of x and y : $\frac{4}{3}x + 2y = 8$; $2x + 3y = 12$
- Q6. In $\triangle ABC$, $\angle A = x$, $\angle B = 3x$, and $\angle C = y$ if $3y - 5x = 30^\circ$, show that triangle is right angled.
- Q7. When you add two numbers and the number obtained by reversing the order of its digits is 165. If the both numbers differ by three, find the number.
- Q8. One says, "Give me a hundred, friend! I shall then become twice as rich as you." The other replies, "If you give me ten, I shall be six times as rich as you." Tell me what is the amount of their (respective) capital?
- Q9. The students of a class are made to stand in rows. If 3 students are extra in a row, there would be 1 row less. If 3 students are less in a row, there would be 2 rows more. Find the number of students in the class.
- Q10. ABCD is a rectangle, find the values of x and y .



Information Technology (Assignment 1 on Part A: Employability Skills):

Booking an appointment with Doctor

I would like to book Can I have	I can't make it Would you like me to	That works for me Do you mind
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I. Use above phrases to fill in the blanks of the conversation (Telephonic)

A: Max hospital Medical services, Annie Speaking. How may I help you?

B: Good afternoon. _____ Appointment with Dr. Rastogi for next week? Preferably on Thursday morning.

A: Let me check the schedule next week. Well, I am sorry. I am afraid he won't be in the hospital on Thursday morning but he has an opening in afternoon at 3.00 PM _____ book an appointment at 3.00 PM?

B: No , _____ . I work full time. So, it has to be either in the morning or evening. What about Friday at 8.30 AM?

A: He will be busy at that time. But he has an opening at 9.15 AM.

B: Great ! _____

II. Read each sentence and add the correct punctuation mark. Then, label it; imperative, declarative, interrogative or exclamatory.

1. How well she sings
2. What is your name
3. Did I say anything to make you angry
4. What is your friend's name
5. Who told you this
6. She is a successful writer
7. It is raining cats and dogs
8. I want to become a writer
9. She does not eat meat or fish
10. Go at once

III. Do the following questions:

1. What is an operating system?

2. Mention any three functions of operating system.

3. Name any three operating systems for computers.

4. Name any three mobile operating systems.

5. What is the name given to screen that appears after Windows operating system is loaded?

6. Small images on the desktop are called _____

7. Name two special icons on the Desktop.

8. Name the icon that provides access to all drives, files and folders on a computer.

9. Name the button to the left of taskbar.

10. Picture for the desktop background is called _____.

IV. In the following exercise, mention if the following statement are 'True' or 'False' for myths of entrepreneurship

1. Entrepreneurs who do not have an innovative idea cannot succeed

2. Entrepreneurs exhibit high risk-taking ability, but they take calculative risks

3. Success in entrepreneurship is mainly about keeping a business sustainable and afloat _____
4. Nothing matters more than the business idea _____

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