SUMMER VACATION HOME-WORK (2020-21)
CLASS X
SUBJECT: ENGLISH

BOOK- FIRST FLIGHT
Chapter-1 A Letter to God

- Lencho suffered first due to drought and then by floods. Our country is also facing such situation in recent years. There is flood and there is drought. There is need to save water through water harvesting. Design a poster for your area as how to save water during summer vacation.

Chapter -2 Nelson Mandela (Long Walk for Freedom)

- **True liberty is freedom from poverty, deprivation and all forms of discrimination**.
  Write an article on the above-mentioned topic. Use the following hints:
    - Causes of poverty and means of overcoming it.
    - Discrimination based on gender, religion, class etc.

Chapter -3 Two stories about flying

- Prepare a collage on the topic- "Migratory Birds –Tracing their Flights.

BOOK- FOOTPRINTS WITHOUT FEET

Chapter- 1 ATriumph of Surgery

- Read the book- ' A Zoo in My Luggage' by Gerald Durrell.

Chapter- 2 The Thief's Story

- Suppose You are Anil, You met a thief like Hari. You gave him food and shelter and help him in education. One day you are being robbed by him. Make a diary entry and share your emotions and feelings**.**

Chapter -3 The Midnight Visitor

- Make a presentation on a story'A Secret Agent', illustrated with scenes. Use your creativity and imagination, let your creativity flow, character take shape, plot and theme unravelled, expressions and vocabulary embellished.

Chapter- 4 A Question of Trust

- Write a letter to the Editor of The Times Of India, describing about the increase in number of robberies and theft in your locality. Do suggest some possible solutions as well. Sign yourself as Neeraj/ Neerja, a resident of C-405, NK Apartments, sector 11, Rohini, New Delhi. (Word limit 150-200)

Grammar Worksheet

- You took your NRI cousin to tour Delhi: you were highly embarrassed to see how the monuments have been damaged because of the scribbling done by the visitors on the walls. Write a letter to the Editor appealing to the people to respect to the heritage of our country. (Writing Skills)
- **The following paragraph contains six errors in Subject-Verb Agreement. Underline the error and re-write the paragraph after correction.**
  According to legend, Santa Claus is a fat old man who visit every house on our planet in about eight hours on one of the coldest nights of the year. Santa, as everyone know, stop for a glass of milk and cookie at each house along the route.

He prefer to work unnoticed, so he wears a luminous red suit and travels with a pack of bell-jangling reindeer. For reasons that most people does not understand, the jolly old man enters each house not by the front door but through the chimney (whether you has a chimney or not). He customarily gives generously to children in wealthy families, and he usually remind poorer children that' it is the thought that counts.

Santa Claus is on the earliest beliefs that parents try to instill in their children. After this absurdity, it's a wonder that any child ever believe in anything again.

- **In the following passage one word has been omitted from each line. Write the omitted word and the word that comes before and the one that comes after against the correct blank number. Ensure that the word that forms your answer is underlined.**

Kite flying was a popular sport that times	(a)……. ……… ………..
And while the girls knotted and sewed	
We boys climbed over the roof enter	(b)…….. ……….. ………
The competition we limited pocket money	(c)…… …….. …….
And was not enough to buy all the	(d)……. ……… ……
Material needed to make our kites.	

- **Rearrange the jumbled words/ phrases into meaningful sentences:**
  (a) Small/ insects/ wagtails/ eating/ are/birds
  (b) Are/ pipits/ closely / to/ they/ related
  (c) Crevices/the/ stone/ nest in/ they/ in walls
  (d) Species/ wagtails/ eight/ are/ of/ about/ there

विषय- हिंदी

1.किसी भी एक कवि पर लगभग 10-12 पृष्ठों में एक एलबम तैयार कीजिए जिसमें कवि का जीवन परिचय,चित्र और,एक मुख्य कविता भावार्थ सहित(पुस्तक में दी हुई कविता से अलग)हो।

2.1-25 तक मुहावरेंवाक्य सहित् अपनी कक्षा पुस्तिका में लिखें।

3.'घर पर रहें, फ्रेश कंपनी के सेनेटाइजर और फर्मा मास्क कंपनी के लिए विज्ञापन बनाइए।

4. महामारी के चलते आपकी दिनचर्या में जो परिवर्तन आया है उसे लगभग 100-120 शब्दों में लघु कथा के रूप में लिखिए।

SUBJECT: PHYSICS

1. Submit a write-up on a noble prize winner in Physics along with his/her photograph
2. Prepare a power point presentation and project report on any topic from chapter "Source of Energy". (For example bio gas plant, nuclear power plant and solar cell etc.)
3. All solved examples, exercises and additional exercises of chapter "light: reflection and refraction" from NCERT book to be done in Physics notebook.

SUBJECT: CHEMISTRY

1. Prepare notes of chapter 3 'METAL AND NON METAL' and to be done in fair notebook.
2. Solve assignment of chapter 3 'METAL AND NON METAL' and to be done in fair notebook.
3. All solved, intext and text book questions of chapter 1,2 and 3 should be done in separate notebook.
4. Prepare a power point presentation and report on any topic from chapter 1,2 and 3.
5. Show the positive aspects of Covid-19 on the following

   a) Environment
   b) Pollution
   c) Marine life
   d) Flora and fauna

e) River
f) Eating habits
6. Practical work :- Write all experiments in practical file.
   (Note: instruction already given in class)

SUBJECT:BIOLOGY

1. Make a PPT on chapter Life processes on any topic of your choice.
2. Make a portfolio on the chapter Our Environment with creativity and innovative ideas by using daily life practical examples.
3. Do the given assignments from chapter Control and Coordination.
4. Write down the notes provided of chapter Reproduction in organisms.

SUBJECT: SOCIAL SCIENCE

I.   Prepare a project report on the topic-
Consumer Awareness
Or
Social Issues
Or
Sustainable Development

Important Instructions

While preparing the project, the points to be kept in mind are:

- The project report should be handwritten.
- Use A4 size sheets.
- Compile the work in a folder provided by school.
- Page limit- 15-20 sheets.
- **Project should have: cover sheet, index, introduction, conclusion, acknowledgement and bibliography/references.**
- The cover sheet of the project should have the following details:
  - **i.   Theme of the Project**
  - **ii. Name**
  - **iii. Class and Section**
  - **iv. Subject**
- Use maps, pictures, diagrams and relevant data for illustration.
- The collected data should have a reliable source and that should be mentioned with it.
- Use eco-friendly products for the project.

II.   Revise the covered syllabus.

Note: This project report is a part of internal assessment.

SUBJECT: INFORMATION TECHNOLOGY

Q1. Consider the following spreadsheet and answer the questions that follow **:**

REGION	SALES 2008	SALES 2009	SALES 2010	SALES 2011
New Delhi	56	67	85	87

Mumbai	66	77	54	91
Chennai	74	85	67	77
Calcutta	75	65	47	63

a. Calculate the Total sale for the year 2008 in cell B6.

b. Write formula/expression to find difference in sales of Mumbai and Delhi for the year 2009.

c. Write formula/expression to find the average sale of year 2010.

d. Write expression to find the total sale for the year 2010 and 2011 in Mumbai.

e. Name the chart that may be used to show the relationship of the changes in the data over a period of time.

Q2. Given the following Spreadsheet, write the appropriate Formula/Expression/Function to be used for (a-e)

PLAYER ID	NAME	POINTS	BONUS	RANK	TOTAL
101	Jaideep	1300	200	4	
102	Ananya	1800	150	1	
103	Mihir	1600	100	3	
104	Varsha	1200	100	5	
105	Sandeep	1700	200	2	

a. Write the formula to calculate the Total points (points + bonus).

b. Write the feature used for arranging the Rank from Highest to Lowest.

c. To find the player with Maximum TOTAL.

d. To find the average of Points.

e. Display the number of total players in Sheet2 in the cell A3 of Sheet1.

Q3. a) Write steps to insert a movie clip. B) Write steps to insert an audio clip.

Q4. Create a presentation on Corona Virus disease (COVID-19).

Q5. Create a presentation on online Education or E-Education.

Q6.Make a Book Cover in Ms.Word.

Q7. Follow these steps.

      1. Create a document in Ms.Word.

      2. Type an essay on the topic 'Pollution'.

      3. Insert page number as footer and 'Pollution' as header.

      4. Use autocorrect to correct the spelling mistakes.

      5. Insert suitable pictures in the document.

      6. Use Wrap feature to wrap the text around the image.

      7. Save the document in .docx format.

Q8.Using smart art draw figure of water cycle.

Q9.Draw a flow chart to find the largest number.Given:NUM1,NUM2 and NUM3.

Q10.Write 5 features of the following software:

    1)Ms.word

    2)Ms.Excel

    3)Ms.Powerpoint

SUBJECT: MATHS

Activity:

1 Make a power point presentation of to verify the consistency or inconsistency of system of linear equations in two variables by graphical representation. (Roll No. 1 to 16)

2. Make a power point presentation to verify the emperical formula for measures of central tendencies by takeing an example. (Roll No. 17 to 33)

Assignment

Ch-3 Pair of linear equations in two variables

1. Solve graphically the following pairs of linear equations. Also, find the coordinates of the points where these lines intersect the two axes. Shade the region (area) between the 2 lines and x axis.
   (i)$2x - y = 4$, $3y - x = 3$
   (ii) $2x + 3y = 12$, $x - y = 1$.
2. Solve the following pair of linear equations by substitution method and elimination method both:
   $3x + y - 11 = 0; x - y - 1 = 0$
3. Solve for x and y: $bx - ay = 0; ax + by = a^2 + b^2$
4. Solve each of the following pairs of linear equations by cross multiplication method :
   (i)$5x - 6y + 30 = 0$, $5x + 4y - 20 = 0$
   (ii) $3x - 4y + 6 = 0$, $3x + y - 9 = 0$
5. Find the value of c for which the pair of equations : $2x + cy = 1$;
   $3x + 5y = 7$ will have i)a unique solution; (ii) no solution.
   Is there a value of c for which the system has infinite number of solutions?
6. Last year 1 kg of tea and 3 kg of sugar together cost Rs 96. This year, the rates of tea increased by 15% and that of sugar by 10%. So the amount of tea and sugar now cost Rs. 108.60. Find the per kg rates of tea & sugar last year.
7. A boat goes 24 km upstream & 28 km downstream in 6 hours. In 6.5 hours, it can go 30 km upstream & 21 km downstream. Find the speed of stream and the speed of boat in still water.
   12. A person invests some amount @ 12% S.I. and some other amount @ 10% S.I.He receives an annual interest of Rs.1300. But if he interchanges the amounts invested, he shall receive Rs.40 more as interest. How much has he invested at each rate?
8. If 1 is added to both the numerator and the denominator of a fraction, it becomes equal to . If, however, 1 is subtracted from both the numerator & denominator of the same fraction, it becomes equal to . Find the fraction.
9. The age of a father 8 yrs back was 5 times that of his son. After 8 yrs, his age will be 8 yrs more than double the age of his son. Find their present ages.
10. There are some lotus flowers in a lake. If 1 butterfly sits on each flower, one butterfly is left behind. If 2 butterflies sit on each flower, 1 flower is left behind. What is the no. of flowers?What is the no. of butterflies?

Chapter 1: Real Numbers

1. Show that one and only one out of n, n+ 2 and n + 4 is divisible by 3, where n is any integer.
2. Use Euclid's division algorithm to show that square of any positive integer is either of 3m or 3m + 1 for some integer m.
3. In the morning walk three persons step of together. They step 80 cm, 85 cm and 95 cm respectively. What is the minimum distance each should walk so that he can cover distance in complete steps.
4. Find the largest positive integer that divide 398, 436 and 542 leaving remainder 7, 11 and 15 respectively.
5. Find the H.C.F of 65 and 117 and express it in the form of 65m + 117n.
6. Express the H.C.F of 465 and 222 as 468x + 222y, where x and y are integers.

7. The length, breadth and height of a room is 8 m 25 cm, 6 m 75 cm and 4m 50 cm respectively. Find the length of the longest rod which can measure the dimensions of the room exactly.
8. Can we have any $n \in N$, where 7^n ends with the digit zero?
9. Show that any positive odd integer is of the form $4q + 1$ or $4q + 3$, where q is a positive integer.
10. Find HCF and LCM of 448, 1008 and 168 using fundamental theorem of arithmetic.

Chapter 14: Statistics

1. While checking the value of 20 observations, it was noted that 125 was wrongly noted as 25 while calculating the mean and then the mean was 60. Find the correct mean.
2. Find the mode of the following items.
   0, 5, 5, 1, 6, 4, 3, 0, 2, 5, 5, 6
3. The daily minimum steps climbed by a man during a week were as under, Find the mean steps

Mond ay	Tuesd ay	Wednesd ay	Thursd ay	Frida y	Saturd ay
34	31	27	32	23	28

4. Consider the following distribution of daily wages of 50 workers of a factory.

Daily wages (in Rs.)	100-120	120-140	140-160	160-180	180-200
Number of workers	12	14	8	6	10

   Find the mean daily wages of the workers of the factory by using an appropriate method.
5. Calculate mode of the following data:

Marks Obtained	0-20	20-40	40-60	60-80	80-100
No. of Students	5	9	12	6	3

6. (i) Find the value of x, if the mode of the following data is 25:
   15, 20, 25, 18, 14, 15, 25, 15 18, 16, 20, 25, 20, x, 18
   (ii) If both 20 and 18 are changed to 15 in the above data, find the new mode.
7. Find median for the following data in fig.

Wages (in ₹)	Number of workers
More than 150	Nil
More than 140	12
More than 130	27
More than 120	60
More than 110	105
More than 100	124
More than 90	141
More than 80	150

8. Find 'p' if the mean of the given data is 15.45.

Class	0-6	6-12	12-18	18-24	24-30

Frequency	6	8	P	9	7

9. The frequency distribution of marks obtained by 53 students out of 100 in a certain examination is given below.

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
No. of Students	5	3	4	3	3	4	7	9	7	8

(i) Draw the cumulative frequency curve or an ogive (of the less than type).
(ii) Draw the cumulative frequency curve or an ogive (of the more than type).

10. Find the median by drawing both types of ogives

Class interval	50 – 60	60 – 70	70 – 80	80 – 90	90 – 100
Frequency	3	5	9	12	6

❖ **Note : Home work assignment should be done in practice notebook.**