

NORTH-EX PUBLIC SCHOOL
(Senior Secondary, Affiliated To CBSE)
School Block, Jain Nagar, Sector-38, Rohini, Delhi – 81
SUMMER HOLIDAY HOMEWORK, 2025-26
CLASS - X

IT

1. Prepare a poster on social awareness on issue of 'Women empowerment'.
2. Draw the diagram importance of Feedback in register.
3. Make a poster with a mind map showing different types of communication barriers and measures to overcome them.
4. Draw the picture principles of communication from pg no – 31.
5. Organize a nature walk with your friends in summer break . Write a report on your observation about the effect of walk had on your state of mind.
6. Write the five points to consider while preparing a Presentation.
7. Write about few lines related to Specific and Non – Specific Feedback.
8. Describe the principles of effective communication.
9. Write two sentences of each type; exclamatory , declarative and interrogative.
10. Explain the steps to manage stress.
11. Complete Ch -1to 6 in Book , Register (if pending) and Revise.

SCIENCE

1. What happens when zinc granules are treated with dilute solution of H_2SO_4 , HCl , HNO_3 , $NaCl$ and $NaOH$. Also write the chemical equations, if reaction occurs.
2. A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed. Write the chemical reaction involved and also mention the type of the chemical reaction?
3. A shiny brown coloured element on heating in air becomes black in color. Name the element and the black coloured compound formed. What is the type of this reaction?
4. An electric heater of resistance $8\ \Omega$ draws $15\ A$ from the service mains for 2 hours. Calculate the rate at which heat is developed in the heater.
5. A wire bent in the form of a circle has resistance of $40\ \Omega$. A and B are the two points on the wire dividing it into a quadrant. Find the value of I_1 and I_2 .
6. What is the difference between resistance and resistivity?
7. Write the Balanced Chemical equation for the process of photosynthesis and their functions. How photosynthesis occurs in desert plants.
8. Explain Exchange of Gases in Humans?
 - b) Explain human heart with functions?
 - c) Explain Excretion system in Humans?
9.
 - a) Make a chart on Alimentary Canal in human's?
 - b) Prepare a one observation report with based of the human's diseases with prescribed medications in booklet form ?
10. Make a Project on The Global Impact of Respiratory Disease, Hemodialysis, Heart Problems (Blood Pressure).

11. Make a working model.

S No	Roll numbers	Suggested Topics
1	1-5	Series Circuit/ Human Heart
2	6-10	Parallel Circuit/ Excretory System
3	11-15	Solenoid/ Human Digestive System
4	16-20	Solar Energy/ Diaphragm & Respiratory System
5	21-25	Wind Energy/ Stomata & Photosynthesis
6	26-30	Thermal Energy/ Chemical Reactions
7	31-35	Hydro Energy/ Importance of pH
8	36-40	Scattering/ Metals and Non Metals
9	41-45	Light/ Carbon Compounds

MATHEMATICS

- If $\tan(A + B) = \sqrt{3}$ and $\tan(A - B) = \frac{1}{\sqrt{3}}$; $0^\circ < A + B < 90^\circ$; $A > B$, find A and B.
- Prove that $\sqrt{2}$ is an irrational number.
- A motor boat whose speed is 18 km/h in still water takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.
- Prove that $\sec A(1 - \sin A)(\sec A + \tan A) = 1$.
- A train travels 360 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less for the same journey. Find the speed of the train.
- A forester wants to plant 66 apple trees, 88 banana trees and 110 mango tree in equal rows (in terms of number of trees). Also, he wants to make distinct rows of the trees (only one type of tree in one row). Find the minimum number of rows required.
- One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting
 - A face card or a black card
 - Neither an ace nor a king
 - A jack and a black card.
- Prove that $(\sin^4 \theta - \cos^4 \theta + 1) \operatorname{cosec}^2 \theta = 2$.
- If $\sin x + \operatorname{cosec} x = 2$, then find the value of $\sin^{19} x + \operatorname{cosec}^{20} x$.
- If the equation $(1 + m^2)x^2 + 2mcx + (c^2 - a^2) = 0$ has equal roots, prove that $c^2 = a^2(1 + m^2)$.
- There is a circular path around a sports field. Ram takes 24 minutes to walk one round of the field while Ravi takes 18 minutes for the same. If they both start at the same point, at the same time and go in the same direction, after how many minutes will they meet again at the starting point?
- Do activities no. 2,3,4,6,8,11,15,16,18,21 in lab Manual.

ENGLISH

- Learn and revise Periodic Test-1 syllabus.
- Read the chapters covered till now and write the difficult terms with its meaning.

3. Make a pictorial project on the life of the poet- Robert Frost depicting the life events, awards and literary works in about 5-6 pages. **(Project Work)**
4. On 21st June Yoga Day is celebrated. Design a poster on the "Importance of Yoga" on A4 size sheet. Use attractive slogan and captions.
5. Design a travel brochure for a specific Indian tourist destination (e.g., Jaipur, Kerala, Goa, etc.).
Tips and Content for brochure:
 - Location and how to get there
 - Climate and best time to visit
 - Accommodation options (hotels, guesthouses, etc.)
 - Famous places to visit (historical sites, beaches, nature spots)
 - Local cuisine and food recommendations
 - Attire and cultural norms to be aware of
 - Possible activities and experiences
 - Maps or illustrations to enhance the brochure
6. Suppose that you were on a morning walk and caught in a heavy storm. How did you manage to save yourself? Compose a story within 150 words.
7. We are now hearing more and more cases of Dengue and Malaria, not just during the monsoon season but in other seasons too. Write a letter to the Editor of a leading national daily, telling him what you think about these medical issues and what should be done to prevent them.
8. You are Smriti /Sumit a class X student. You want to learn a foreign language during your summer holidays. Draft a letter to the Director of the institute of Foreign Languages, Hyderabad, asking about short term foreign language courses for school students through correspondence.
9. Practice Analytical Paragraph from Acme Practice Book. (Page no. 70 & 73)
10. Practice grammar topics covered till now from Acme Practice Book. (Page no. 113 - 115 & 135 - 138)

SOCIAL SCIENCE

- Q1. "Planning of resources is very important for a country like India." Justify by giving three reasons.
- Q2. Which soil is considered ideal for growing cotton? How is the soil formed?
- Q3. What changes were introduced after the French Revolution in France?
- Q4. Explain the features of the painting of Frederic Sorrieu.
- Q5. What do you mean by the word ethnic?
- Q6. What is community government? Explain the concept of community government with context to Belgium.
- Q7. 'The federal system has dual objectives.' Mention the dual objectives.
- Q8. What are Residuary powers?
- Q9. 'Money cannot buy all the goods and services that one needs to live well.' Explain.
- Q10. **Project work** - Make a project on **any one** topic from the following:-

Sustainable Development

OR

Consumer Awareness

OR

Social Issues

HINDI

- प्रश्न 1. पाठ 'बड़े भाई साहब' के आधार पर बताइए कि क्या कारण था कि दिन भर किताबों में घुसे रहने के बावजूद बड़े भाई साहब एक ही कक्षा में तीन बार फेल हो गए जबकि छोटा भाई खेलने-कूदने के बावजूद भी दनादन पास होता गया ?
- प्रश्न 2. कबीर की प्रत्येक साखी से मिलने वाली सीख को अपने शब्दों में संक्षेप में लिखिए।
- प्रश्न 3. कबीर द्वारा वर्णित 'कस्तूरी' के विषय में जानकारी प्राप्त कीजिए व लिखिए।
- प्रश्न 4. मीरा के पदों में निहित प्रह्लाद व हिरण्यकश्यप कौन थे तथा इनका आपस में क्या संबंध था?
- प्रश्न 5. 'हरिहर काका' कहानी समाज के किस कटु सत्य को उजागर करती है? स्पष्ट कीजिए। क्या मात्र पैसा ही आज पारिवारिक रिश्तों की मिठास का आधार रह गया है आप इससे कितना सहमत हैं?
- प्रश्न 6. 'विश्व पटल पर हिंदी का बढ़ता वर्चस्व' विषय पर लगभग 100 शब्दों में अनुच्छेद लिखिए।
- प्रश्न 7. 'करत-करत अभ्यास के जड़मति होत सुजान' विषय पर लगभग 100 शब्दों में अनुच्छेद लिखिए।
- प्रश्न 8. आपके विद्यालय में 'हिंदी कार्यशाला' का आयोजन किया जा रहा है। इसमें विभिन्न विषयों पर प्रतियोगिताएं जैसे भाषण, नाटक, काव्य-सम्मेलन आदि होंगे। इनकी सूचना विद्यार्थियों को देते हुए लगभग 80 शब्दों में सूचना लिखिए।
- प्रश्न 9. रचना के आधार पर सरल संयुक्त व मिश्र वाक्य में उदाहरण सहित अंतर स्पष्ट कीजिए।
- प्रश्न 10. सगुण भक्ति धारा के कवि सूरदास, रसखान, मीराबाई और तुलसीदास के विषय में जानकारी प्राप्त कीजिए व चित्र सहित एक परियोजना कार्य तैयार कीजिए।

VISUAL ART

1. Take a A3 size sheet and make a beautiful mandala Art on it.
2. Make a lippan Art jharokha on waste Cardboard and decorate it beautifully.