

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME: SOCIAL SCIENCE	
CLASS & SECTION: X A,B,C	SUBJECT TEACHER NAME: DS & JS
<div>1. INSTRUCTIONS:</div> <div><div>a. Project length: Prepare approximately 8–12 pages, excluding the cover page and bibliography.</div><div>b. Project sequence: Arrange the project in this order: cover page, index, introduction, objectives, interdisciplinary activities, findings, conclusion and bibliography.</div><div>c. Research: Use the NCERT History textbook, official websites of the IMF and World Bank, and reliable government sources.</div><div>d. Original work: Write explanations in your own words and handwriting. Clearly acknowledge the sources of information, maps, pictures, tables and statistics.</div><div>e. Presentation: Use suitable headings, subheadings, neat handwriting or clear printing, labelled maps, relevant pictures and properly titled graphs.</div><div>f. Data accuracy: Mention the financial years and units used in all statistical tables.</div><div>g. Analysis: Explain what you have learnt and how the activities connect with the main topic.</div><div>h. Conclusion: Write your own conclusion in approximately 100–150 words, explaining the historical importance of Bretton Woods and its relationship with globalisation.</div><div>i. Submission: Submit the completed project by 25 Nov 2026</div></div>	

ASSIGNMENT

CHAPTER NO.: The Making of a Global World

CHAPTER NO.: The Making of a Global World

PROJECT WORK: INTERDISCIPLINARY PROJECT

Title: The Bretton Woods Conference and the Beginning of Globalisation

Note: Cadets must complete the following activities in their project file.

Activity 1: Historical investigation

Write a short account of the Bretton Woods Conference covering:

- Why was the conference organised in 1944?
- What were its major objectives?
- What were the roles of the IMF and the IBRD?
- How did the post-war economic system encourage international cooperation?

Activity 2: Mapping the global economy

Prepare a labelled world map showing:

- Bretton Woods, New Hampshire, USA.
- Washington, D.C., USA.
- India and at least four other countries involved in international trade.
- Selected international trade routes.

Activity 3: Data analysis

Prepare a comparative table of India's exports and imports for any two recent financial years using reliable sources such as the Ministry of Commerce and Industry or official government publications. Calculate the trade balance for each year and write two conclusions about India's international trade.

Activity 4: Globalisation in everyday life

Select any three everyday products, such as a mobile phone, a garment or a packaged food product. Investigate where the product or its components are made, the countries involved in its production, and how it reaches Indian consumers.

Explain how international trade and economic interdependence are reflected in these products.

Activity 5: Creative presentation

Create one of the following:

- A poster on the beginning of globalisation.
- A timeline from 1944 to the expansion of modern globalisation.
- An infographic comparing the IMF and the World Bank.
- A short newspaper report titled “Bretton Woods: Building a New World Economic Order.”

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME: HINDI

CLASS & SECTION: X A, B, C

SUBJECT TEACHER NAME: B K SINGH

सामान्य निर्देश

- सभी प्रश्न अनिवार्य हैं ।
- दिए गए निर्देशों का पालन करते हुए सभी प्रश्नों को हल करें ।

ASSIGNMENT

प्रश्न - 1. विकारी और अविकारी की परिभाषा एवं उनके भेदों को उदाहरण सहित लिखिए।

प्रश्न - 2. नीचे दिए गए निम्न अलंकारों की परिभाषा एवं उनके 10 उपयुक्त उदाहरण खोजकर लिखिए।

क . उपमा अलंकार

ख. रूपक अलंकार

ग. उत्प्रेक्षा अलंकार

घ. अतिशयोक्ति अलंकार

च. मानवीकरण अलंकार

प्रश्न - 3. विज्ञापन क्या है? वर्तमान समय में विज्ञापन की आवश्यकता क्यों होती है? लिखिए। इसके अतिरिक्त (घड़ी, जूता, मोबाइल एवं चाय की बिक्री के लिए लगभग 50 शब्दों में A4 सीट पर विज्ञापन तैयार कीजिए, जिसमें चित्र और रंगों का भी इस्तेमाल हो।

प्रश्न - 4. राष्ट्रभाषा एवं राजभाषा में क्या अंतर एवं उनका महत्व क्या है? लगभग 200 शब्दों में लिखिए।

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME: COMPUTER SCIENCE

CLASS & SECTION: X

SUBJECT TEACHER NAME: Mr Manoj Singh

INSTRUCTIONS:

- Write the answers in your own words in the homework notebook; do not copy from the internet or AI tools.
- Do the Excel practical on a computer using formulas only, not by calculating manually.
- Submit the notebook and the Excel file on the day the school reopens.

ASSIGNMENT

TOPIC 1: ARTIFICIAL INTELLIGENCE

Q1. Short Answer (3–4 lines each)

- What is Artificial Intelligence? Give two examples of AI that you use in daily life.
- Differentiate between Artificial Intelligence, Machine Learning and Deep Learning in one line each.
- Write two benefits and two risks of using AI in education.
- What is AI bias? Give one example of how it can affect people unfairly.

TOPIC 2: SOCIAL MEDIA AND RESPONSIBLE USE

Q2. Short Answer (3–4 lines each)

- What is social media? Name any four social media platforms.
- What is cyberbullying? How should a student respond if he/she faces it?
- What is a digital footprint? Why should we think before we post online?
- How do social media apps use AI to decide which videos or posts you see?

Q3. Paragraph Writing

- Write a paragraph (80–100 words) on "Social Media: Boon or Bane for Students".

PROJECT WORK:

Title: Monthly Expense Sheet in MS Excel (Arithmetic Operations)

Practical Tasks

- Open MS Excel and create a sheet with the columns: Item, Quantity, Rate and Amount.
- Enter at least 5 items (for example, notebooks, pens, snacks) with their quantity and rate.
- Find the Amount for each item using multiplication: $=B2 * C2$
- Find the total expense using addition: $=SUM(D2 : D6)$
- Enter your budget in B8 and find the balance using subtraction: $=B8 - D7$
- Find the average cost per item using division: $=D7 / 5$
- Give a heading to the sheet, make the headings bold and add borders to the table.
- Save the file as `ClassX_Name_RollNo.xlsx`

Use cell references in all formulas so that the results change automatically when a value is changed.

Note: Submit the project file (.xlsx) to the following email address as part of your holiday homework:
sschittor.computer@gmail.com

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME: HINDI

CLASS & SECTION: X A, B, C

SUBJECT TEACHER NAME: RAMESH SAH

सामान्य निर्देश

1. सभी कार्य A4 आकार के पन्नों / हस्तनिर्मित स्क्रेप फ़ाइल में स्पष्ट हस्तलेख और दिनांक सहित पूर्ण करें।
2. यह गृहकार्य केवल सैद्धांतिक उत्तर नहीं, बल्कि आपके व्यावहारिक आचरण और जीवन-मूल्यों का संकलन है।
3. प्रस्तुति में रचनात्मकता, भाषा-शुद्धता और विचारों की मौलिकता को विशेष वरीयता दी जाएगी।

ASSIGNMENT

प्रश्न - 1. देश की सीमाओं पर तैनात किसी वीर सैनिक के नाम 100-120 शब्दों में एक भावपूर्ण पत्र लिखें, जिसमें उनके त्याग के प्रति आभार और एक अनुशासित नागरिक के रूप में देश-सेवा का आपका संकल्प व्यक्त हो।

प्रश्न - 2. सुभद्रा कुमारी चौहान की 'झाँसी की रानी' के शौर्य को केंद्र में रखकर अपने परिवेश की किसी जुझारू महिला (श्रमिक, चिकित्सक, माता आदि) के जीवन-संघर्ष पर 8-10 वाक्यों का एक प्रेरक चरित्र-चित्रण (केस-स्टडी) लिखें।

प्रश्न - 3. शेखर जोशी की कहानी के मानवीय भाव को समझते हुए परिवार के साथ एक शाम (2 घंटे) मोबाइल व टीवी से पूरी तरह दूर रहें। अपनों के संग संवाद और पारंपरिक खेलों के इस अनुभव पर 100 शब्दों में दिनांक सहित डायरी लिखें।

प्रश्न - 4. महात्मा गांधी, सुभाषचंद्र बोस, भगत सिंह अथवा सरदार वल्लभभाई पटेल में से किसी दो राष्ट्रीय नायकों का चयन कीजिए। उनके जीवन, विचारों और देश के प्रति योगदान पर आधारित तुलनात्मक तालिका बनाइए। फिर "आज के भारत को इन नायकों से क्या सीखना चाहिए?" विषय पर 200-250 शब्दों का विचारात्मक लेख लिखिए।

प्रश्न - 5. अपने घर, विद्यालय या मोहल्ले में देश के प्रति जिम्मेदारी निभाने के पाँच व्यावहारिक कार्य पहचानिए—जैसे सार्वजनिक संपत्ति की रक्षा, स्वच्छता, जल-संरक्षण, यातायात नियमों का पालन या जरूरतमंद की सहायता। इनमें से किसी एक कार्य को करके अपने अनुभव पर 150-200 शब्दों की रिपोर्ट लिखिए। अंत में देशभक्ति पर आधारित एक मौलिक नारा तैयार कीजिए।

प्रश्न - 6. अपने आसपास की किसी एक सामाजिक समस्या का चयन कीजिए—जैसे जल की बर्बादी, प्लास्टिक प्रदूषण, बुजुर्गों की उपेक्षा, डिजिटल दुर्व्यवहार या शिक्षा में असमानता। उसके कारण, प्रभाव और तीन व्यावहारिक समाधान लिखिए। इसके बाद इस विषय पर एक औपचारिक पत्र संबंधित अधिकारी को संबोधित करते हुए तैयार कीजिए।

प्रश्न - 7. कल्पना कीजिए कि आपको युवा संसद में तीन मिनट बोलने का अवसर मिला है। विषय है—“2047 का विकसित भारत: शिक्षा, रोजगार, आर्थिक आत्मनिर्भरता और नैतिक नागरिकता।” अपने भाषण में चार ठोस सुझाव दीजिए। भाषण में एक हिंदी कवि या लेखक के विचारों का संदर्भ, एक राष्ट्रीय नायक से मिली सीख और एक व्यक्तिगत संकल्प अवश्य शामिल करें।

SAINIK SCHOOL CHITTORGARH

AUTUMN VACATION HOLIDAY HOMEWORK : 2026-27

INFORMATION

SUBJECT NAME: BIOLOGY

CLASS & SECTION: X A,B,C

SUBJECT TEACHER NAME: BHUPENDRA BIHARI VYAS

INSTRUCTIONS:

Format: The project must be compiled in an A4-size practical/project file with one-side ruled sheets.

Handwriting: The write-up must be neatly handwritten. Headings should be highlighted using black ink, while running text should be in blue ink.

Illustrations: Draw neat, labeled pencil diagrams or paste relevant printouts/photographs on the blank (left-hand) pages facing the respective written content.

ASSIGNMENT TOPIC : HEREDITY & EVOLUTION

SECTION I: Acquired and Inherited Traits

- **Inherited Traits:**
 - Definition
 - Evolutionary Role
 - Examples
- **Acquired Traits:**
 - Definition
 - Cellular Mechanism
 - Examples

SECTION II: Speciation

Speciation is the evolutionary process by which an existing ancestral species diverges into one or more genetically distinct, reproductively isolated descendant species.

- **Primary Factors Leading to Speciation:**
 - Geographical Isolation
 - Genetic Drift
 - Natural Selection
 - Reproductive Isolation

SECTION III: Evolution and Classification

- Principle of Common Descent
- Hierarchy of Classification

SECTION IV: Tracing Evolutionary Relationships

- Homologous Organs (Evidence of Divergent Evolution):
- Analogous Organs (Evidence of Convergent Evolution):
- Molecular Phylogeny

SECTION V: Fossils and Paleontological Evidences

Fossils are the preserved remains, impressions, petrified parts, or traces of pre-existing organisms that lived in distant geological epochs, typically entombed within sedimentary rock layers.

- Techniques for Dating Fossils:
- Significance of Connecting Links (Transitional Fossils)

SECTION VI: Evolution by Stages

- Evolution of the Complex Eye
- Functional Shift (Exaptation — Evolution of Feathers)
- Artificial Selection (Human-Guided Evolution)

SECTION VII: Human Evolution

Human evolution is characterized by a complex, branching phylogenetic bush rather than a simple, straight ladder of replacement.

- Tools for Reconstructing Human Ancestry
- Geographical Cradle
- Global Migration Patterns
- Key Milestones in the Human Evolutionary Tree

BIBLIOGRAPHY / REFERENCES

- **Textbooks:**
 - NCERT Science Textbook for Class X, National Council of Educational Research and Training.
 - Exemplar Problems in Science, Class X, NCERT.
- **Reference Books:**
 - Pradeep's A Text Book of Biology for Class X.
- **Websites & Digital Resources:**
 - National Center for Biotechnology Information (NCBI) – Education Resources.

SAINIK SCHOOL CHITTORGARH

AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT : MATHEMATICS

CLASS & SECTION: X A , X B & XC

SUBJECT TEACHER NAME: RAKESH RAMPURIA, Manish Jain & AMIT KUMAR JHA

INSTRUCTIONS:

1. Use separate Note book for Mathematics.
2. Writing should be very neat and clean.
3. Do all work with date & day.

INSTRUCTIONS FOR PROJECT WORK:

1. Introduce yourself (Name of cadet, School No, Class & Section) and your topic (Name of Activity/Objective) at the beginning of your PROJECT WORK.
2. Activity should be framed in such a way that it is self-explanatory and well illustrated.
3. One cadet will do any one project out of the listed projects.

ASSIGNMENT

Notebook Assignment:

CHAPTER 1: REAL NUMBERS

Q.1 The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 am, at what time they change together next.

Q.2 Prove that $6-\sqrt{7}$ is irrational number, given that $\sqrt{7}$ is an irrational number.

Q.3 An army contingent of 612 members is to march behind an army band of 48 members in a parade. The two groups are to march in the same number of columns. What is the maximum number of columns in which they can march?

Q.4 Explain why $2 \times 3 \times 5 + 5$ and $5 \times 7 \times 11 + 7 \times 5$ are composite numbers.

CHAPTER 2: POLYNOMIALS

Q.1 If α and β , are zeroes of the quadratic polynomial $x^2 - 7x + 10$, form a quadratic polynomial whose zeroes are α^2 and β^2 .

Q.2 Find a quadratic polynomial whose zeroes are reciprocals of the zeroes of the polynomial $f(x) = ax^2 + bx + c$, $a \neq 0, c \neq 0$.

Q.3 Find the zeroes of a quadratic polynomial $2x^2 + 3x - 14$ and verify the relationship between the zeroes and its coefficients.

Q.4 Write the polynomial, the product and sum of whose zeroes are $-9/2$ and $-3/2$ respectively.

CHAPTER 3: PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Q.1 Two people are 16 km apart on a straight road. They start walking at the same time. If they walk towards each other with different speeds, they will meet in 2 hours. Had they walked in the same direction with same speeds as before, they would have met in 8 hours. Find their walking speeds.

Q.2 If the system of linear equations $2x + 3y = 7$ and $2ax + (a+b)y = 28$ have infinite number of solutions, then find the values of a and b .

Q.3 A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Rittik paid Rs. 27 for a book kept for 7 days and Manmohan paid Rs. 21 for a book kept for

5 days. Find the fixed charges and the charge for each extra day.

Q.4 Determine graphically the coordinates of the vertices of a triangle, the equations of whose sides are given by $2y-x=8$, $5y-x=14$ and $y-2x=1$.

CHAPTER 4: **QUADRATIC EQUATIONS**

Q.1 Two water pipes together can fill a tank in $15/8$ hours. The pipe with larger diameter takes 2 hours less than the pipe with smaller diameter to fill the tank separately. Find the time in which each pipe can fill the tank separately.

Q.2 If one zero of the polynomial $p(x) = 6x^2 + 37x - (k-2)$ is reciprocal of the other, then find the value of k .

Q.3 Find the value of m for which the quadratic equation $(m-1)x^2 + 2(m-1)x + 1 = 0$ has two real and equal roots.

Q.4 A train travels 360 km at a uniform speed. If the speed had been 5 km/hr more, it would have taken 1 hr less for the same journey. Find the speed of the train.

CHAPTER 5: **ARITHMETIC PROGRESSIONS**

Q.1 Rohan repays his total loan of Rs. 1, 18,000 by paying every month starting with the first instalment of Rs. 1,000. If he increases the instalment by Rs. 100 every month, what amount will be paid by him in the 30th instalment? What amount of loan has he paid after 30th instalment?

Q.2 The ratio of 11th term to the 18th term of an AP is 2:3. Find the ratio of the 5th term to the 21st term. Also, find the ratio of the sum of first 5 terms to the sum of first 21 terms.

Q.3 If p th term of an AP is q and q th term is p , then prove that its n th term is $(p+q-n)$.

Q.4 If m times the m th term of an Arithmetic Progression is equal to n times its n th term and $m \neq n$, show that the $(m+n)$ th term of the A.P. is zero.

CHAPTER 6: **TRIANGLES**

Q.1 Sides AB and BC and median AD of a triangle ABC are respectively proportional to sides PQ and QR and median PM of $\triangle PQR$. Show that $\triangle ABC \sim \triangle PQR$.

Q.2 Diagonals AC and BD of a trapezium ABCD with $AB \parallel DC$ intersect each other at point O. show that $OA/OC = OB/OD$.

Q.3 .If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, prove that the other two sides are divided in the same ratio.

Q.4 If the diagonals of a quadrilateral divide each other proportionally, prove that it is a trapezium.

CHAPTER 7: **COORDINATE GEOMETRY**

Q.1 Find the ratio in which y-axis divides the line segment joining the points (5,-6) and (-1,-4).

Q.2 The line segment joining the points A (4,-5) and B (4, 5) is divided by the point P such that $AP:AB=2:5$. Find the coordinates of P.

Q.3 If the points A(2,3) , B(-5,6), C(6,7) and D(p,4) are the vertices of a parallelogram ABCD, find the value of p .

Q.4 Points P and Q trisect the line segment joining the points A (- 2, 0) and B (0, 8) such that P is near to A. Find the coordinates of points P and Q.

CHAPTER 8: **INTRODUCTION TO TRIGONOMETRY**

Q.1 Prove that $(\operatorname{cosec} A - \sin A)(\sec A - \cos A) = 1 / (\cot A + \tan A)$.

Q...2 Prove that: $(\sin \theta - \cos \theta + 1) / (\sin \theta + \cos \theta - 1) = 1 / (\sec \theta - \tan \theta)$.

Q.3 Prove that: $(\sin A - 2\sin^3 A) / (2\cos^3 A - \cos A) = \tan A$.

Q.4 Prove that: $(2\cos^3 \theta - \cos \theta) / (\sin \theta - 2\sin^3 \theta) = \cot \theta$

CHAPTER 9: **SOME APPLICATIONS OF TRIGONOMETRY**

Q.1 From a point on the ground, the angles of elevation of the bottom and the top of a transmission tower fixed at the top of a 20 m high building are 45° and 60° respectively. Find the height of the

tower. (Use $\sqrt{3} = 1.73$)

Q.2 A man on the top of a vertical tower observes a car moving at a uniform speed coming directly towards it. If it takes 18 minutes for the angle of depression to change from 30° to 60° , how soon after this will the car reach the tower?

Q.3 Two ships are approaching a light-house from opposite directions. The angles of depression of the two ships from the top of the light-house are 30° and 45° . If the distance between the two ships is 100 m, find the height of the light-house. [Use $\sqrt{3} = 1.732$]

Q.4 The angle of elevation of an aeroplane from a point A on the ground is 60° . After a flight of 15 seconds, the angle of elevation changes to 30° . If the aeroplane is flying at a constant height of $1500\sqrt{3}$ m, find the speed of the plane in km/hr.

CHAPTER 10: CIRCLES

Q.1 Prove that opposite sides of a quadrilateral circumscribing a circle subtend supplementary angles at the centre of the circle.

Q.2 Prove that the length of tangents drawn from an external point to a circle are equal.

Q.3 Prove that a parallelogram circumscribing a circle is a rhombus.

Q.4 From an external point, two tangents are drawn to a circle. Prove that the line joining the external point to the centre of the circle bisects the angle between the two tangents.

PROJECT WORK:

1. To make a mathematical instrument 'clinometer' for measuring the angle of elevation/depression of an object.
2. To establish a formula for the sum of first n terms of an Arithmetic Progression.
3. To obtain the formula for the lateral surface area of a right circular cylinder in terms of radius (r) of its base and height (h).
4. To verify that the lengths of tangents to a circle from some external point are equal.
5. To verify experimentally that the tangent at any point of a circle is perpendicular to the radius through that point.
6. To get familiar with the idea of probability of an event through a double card experiment.
7. To give a suggestive demonstration of the formula for the volume of a right circular cone.
8. To find the formula for the volume of a sphere with the help of an activity.
9. To give a suggestive demonstration of the formula for the surface area of a sphere in terms of its radius.
10. To give a suggestive demonstration of the formula for the lateral surface area and total surface area of a right circular cone.
11. To obtain the formula for the lateral surface area of a right circular cylinder in terms of radius (r) of its base and height (h).
12. To verify the conditions of consistency/ inconsistency for a pair of linear equations in two variables by graphical method.
13. To find the sum of the first n odd natural numbers.
14. To verify the distance formula by graphical method.
15. To verify the Basic Proportionality Theorem using parallel line board and triangle cut-outs.
16. To verify section formula by graphical method.
17. To establish the criteria for similarity of two triangles.
18. To obtain formula for area of a circle experimentally.

Note: Kindly allocate the required number of questions*

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK 2026

SUBJECT NAME: ENGLISH	
CLASS & SECTION: X A,B& C	SUBJECT TEACHER NAME: Rawal Rathore
<ul style="list-style-type: none">• Attempt all five questions, following the given instructions• GENERAL INSTRUCTIONS• · Use A4-size sheets or a project file and write neatly in your own handwriting.• · Include a cover page, index, acknowledgement, conclusion and bibliography, where applicable.• · Use relevant pictures, drawings or newspaper cuttings.• Maintain grammatical accuracy, avoid copying directly from sources, and acknowledge all sources.•	
<p>Q1. Nelson Mandela – The Struggle for Freedom</p> <p><i>How does Nelson Mandela’s life teach us the importance of freedom, equality and forgiveness?</i></p> <p>Project instructions</p> <ul style="list-style-type: none">· Briefly introduce Nelson Mandela and apartheid.· Describe the major challenges he faced.· Explain the significance of his views on courage and fear.· Connect his ideas with present-day society. <p>Include a timeline and two relevant pictures.</p> <p style="text-align: right;">Task / word limit: 400–500 words</p>	
<p>Q2. Glimpses of India – Unity in Diversity</p> <p><i>How does the chapter present India’s cultural and geographical diversity?</i></p> <p>Instructions</p> <ul style="list-style-type: none">· Describe a baker from Goa, Coorg and tea from Assam.· Include details of food, traditions, landscapes and lifestyles.· Compare the three regions in a table.· Paste or draw a map of India and mark the places. <p>Conclude by explaining the importance of preserving India’s cultural heritage.</p> <p style="text-align: right;">Task / word limit: 400–500 words</p>	
<p>Q3. The Message of Nature in Poetry</p> <p><i>How do “Dust of Snow”, “Fire and Ice” and “The Trees” communicate ideas about human life and thenvironment?</i></p> <p>Instructions</p> <ul style="list-style-type: none">· Explain the central theme of each poem.· Discuss the use of symbolism and imagery.· Describe nature’s influence on human emotions.· Connect the poems with present-day environmental issues. <p>Include illustrations and three meaningful lines from the poems.</p> <p style="text-align: right;">Task / word limit: 350–450 words</p>	
<p>Q4. As assigned on the Wordsworth English Language Lab</p> <p>Listening Skills – Conversation -Twin Brothers Talking</p> <p><i>How does conversation helps us in our day to day life ?</i></p> <p>Instructions</p> <p>Complete the assigned Listening Skills task, “Conversation Twin Brothers”, on the Wordsworth English Language Lab system.</p> <p>Follow the instructions provided on the lab platform.</p> <p>Record key ideas or learning points in your project notebook, if required.</p>	
<p>5. As assigned on the Wordsworth English Language Lab</p> <p>Speaking Skills – My Love for Travelling</p> <p><i>How does travelling help us learn about people, places and ourselves?</i></p> <p>Instructions</p> <p>Prepare and deliver the assigned speaking task, “My Love for Travelling”, on the Wordsworth English Language Lab system.</p> <p>Organize your talk with a clear introduction, two or three supporting points and a conclusion.</p> <p>Speak clearly and confidently, using relevant examples from travel or places you wish to visit.</p>	

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK 2026

SUBJECT NAME: CHEMISTRY

CLASS & SECTION: X A,B&C

SUBJECT TEACHER NAME: GYANESHWAR SINGH

INSTRUCTIONS:

- Project should be completed in the practical file with suitable diagram.
- Use separate notebook for the homework.

ASSIGNMENT

1. Completion of practical file.
 - (a) Types of reactions
 - (b) Action of acid and base on litmus paper, zinc metal and sodium carbonate.
 - (c) Reactivity series
 - (d) Foaming capacity of soap and detergents in hard and soft water.
2. IUPAC nomenclature of
 - (a) Alkanes , alkenes and alkynes
 - (b) Alcohols
 - (c) Aldehyde and ketone
 - (d) Carboxylic acid
3. Flow chart of metallurgy.
4. Allotropy.

CCB, SAINIK SCHOOL CHITTORGARH

AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME:	
CLASS & SECTION: X(A, B, C)	SUBJECT TEACHER NAME: BHANDARKAR C L
<div>INSTRUCTIONS:</div> <div><ul style="list-style-type: none">Prepare a file and model for any one of the following projects.Project work will be awarded with marks for enrichment activity of board exam.</div>	

ASSIGNMENT

Chapter-1- Electricity

- Comparing the Conductivity of Various Materials: Designing an Ohm's Law Tester
- Factors Affecting Electrical Resistance: An Empirical Study on Wire Length and Thickness
- Energy Conservation in Action: Building and Analyzing Series vs. Parallel Household Circuit Models
- Designing a Cost-Effective Homemade Liquid Battery Using Kitchen Ingredients
- Investigating the Efficiency and Power Consumption of Incandescent Bulbs vs. LEDs
- Why is the Sky Blue? Simulating Atmospheric Tyndall Scattering Using Milk Solutions
- The Crimson Sunset: Recreating Dawn and Dusk Sky Gradients in a Laboratory Flask
- Fog Lights and Safety Signals: Analyzing the Penetrative Power of Shorter vs. Longer Wavelengths
- Investigating Scattering and the Tyndall Effect Across Colloid, Suspension, and True Solutions

Chapter -2. Magnetic Effect of Current

- The Electromagnetic Crane: Constructing a Working Model to Study Magnetic Field Strength
- Mapping Magnetic Field Lines: Visualizing Fields Around Straight, Circular, and Solenoid Conductors
- Demonstrating Fleming’s Left-Hand Rule Through a DIY Miniature DC Motor
- Understanding Domestic Safety Devices: Simulating an Overloading and Short-Circuit Protection System

3. Reflection of Light by Spherical Mirrors

- The Solar Cooker Project: Harnessing Heat Energy Using Concave Mirrors
- Verifying the Mirror Formula and Sign Conventions Through Ray Tracking Experiments
- Blind Spot Detectors and Rearview Optics: Analyzing the Wide Field of View in Convex Mirrors

4. Human Eye and Colourful World

- The Optical Camera vs. The Human Eye: A Comparative Structural Study
- Visualizing Defects of Vision: Modeling Myopia, Hypermetropia, and Their Corrective Lenses
- The Magic of the Prism: Investigating the Angle of Deviation and Dispersion of White Light
- Reconstructing Newton's Experiment: Building a Colour Wheel to Demonstrate White Light Composition

5. Scattering of Light.

- Why is the Sky Blue? Simulating Atmospheric Tyndall Scattering Using Milk Solutions

- The Crimson Sunset: Recreating Dawn and Dusk Sky Gradients in a Laboratory Flask
- Fog Lights and Safety Signals: Analyzing the Penetrative Power of Shorter vs. Longer Wavelengths
- Investigating Scattering and the Tyndall Effect Across Colloid, Suspension, and True Solutions

6. Refraction of Light

- Verifying Snell's Law and Tracking the Lateral Displacement of Light in a Glass Slab
- The Mirage Illusion: Recreating and Explaining Total Internal Reflection in the Lab
- Apparent Depth Phenomenon: Calculating the Refractive Index of Different Transparent Liquids

Note: