

APEX PUBLIC SCHOOL

Summer Holiday Homework

(2026–27)

Class: X

ENGLISH

1. Creative Writing for School Magazine

Write a creative piece for the Annual School Magazine.

You may choose any one of the following:

- Self-composed poem/ Short article/ Short story/Travel experience/ Inspirational write-up/Personal reflection

Guidelines:

- Original and creative content
- Proper title and presentation
- Word limit: 150–200 words
- Use simple yet expressive language

2. Literature Enrichment Activity

Choose Any ONE of the Following:

Option A: Inspirational Personalities Research Project

Connect real-life personalities with the themes from the book 'First Flight'.

Suggested Examples:

- Nelson Mandela and Mahatma Gandhi
- Anne Frank and Malala Yousafzai

Include:

- Brief introduction/Similar qualities/themes/Struggles and achievements/ Inspirational message/Pictures or illustrations

OR

Option B: Poetry Illustration Book

Choose poems from the textbook and prepare a creative poetry booklet.

Suggested Poems:

- Dust of Snow

- Fire and Ice
- Amanda!
- Fog

Include:

- Theme of the poem
- Poetic devices
- Drawings/visual interpretations
- Personal reflection on the poem

3. A3 Sheet Presentation Activity

Choose Any ONE of the Following Tasks and prepare it on an A3 size sheet.

Option A: "Do You Know?" English Facts Wall

Present interesting facts related to English language such as:

- Origins of words
- Silent letters
- Longest English words
- Common grammar mistakes

OR

Option B: English Around the World Map

Prepare a world map showing:

- Countries where English is spoken
- Different English accents
- Famous English expressions

OR

Option C: Pronunciation Display

Write difficult English words with their phonetic pronunciation.

Examples:

- Environment, Comfortable, February, Vegetable, Colonel

OR

Option D: Powerful Vocabulary Chart

Replace simple words with advanced vocabulary.

Examples:

Good → Excellent

Bad → Terrible

Happy → Delighted

Big → Enormous

Note: Kindly revise PA2 syllabus

HINDI

● साहित्यिक पत्रिका:- एक स्वनिर्मित 'हिंदी पत्रिका' (हिंदी मैगजीन) तैयार कीजिए। इसमें निम्नलिखित चीजों का समावेश होना चाहिए:-

i. कवि/लेखक परिचय:- स्पर्श की पाठ्यपुस्तक से किसी भी एक पसंदीदा कवि या लेखक का चित्र बनाकर, उनके बारे में पाँच अनोखे तथ्य लिखें।

ii. स्वरचित कविता/कहानी लिखें।

● विज्ञापन प्रदर्शनी:- आपको कोई भी दो आकर्षक विज्ञापन बनाने हैं।

(विषय:- i. प्राकृतिक उपचार (नैचुरल थेरेपी)

ii. एक पुरानी कार बेचने के लिए।

● साक्षात्कार:- अपने घर के किसी बड़े सदस्य का (दादा-दादी/नाना-नानी) का साक्षात्कार लें और उनसे उनके स्कूल के दिनों के बारे में पूछें।

(● पाँच-छ प्रश्न पहले से तैयार रखें और उनके जवाबों को एक रिपोर्ट की तरह लिखें।)

नोट:- ग्रीष्मकालीन अवकाश गृहकार्य के लिए एक अलग से नोटबुक बनाएँ।

ग्रीष्मकालीन अवकाश गृहकार्य करना अनिवार्य है।

MATHEMATICS

1. If the HCF (2520, 6600) = 40 and LCM (2520, 6600) = $252 \times k$, then find k.
2. Can the number $(15)^n$, n being a natural number, end with the digit 0? Give reasons.
3. If two positive integers p and q can be expressed as $p = 18a^2b^4$ and $q = 20a^3b^2$, where a and b are Prime numbers, then find LCM (p, q).
4. Prove that $5 - \sqrt{3}$ is an irrational number. It is given that $\sqrt{3}$ is an irrational number.
5. Show that the number $5 \times 11 \times 17 + 3 \times 11$ is a composite number.
6. If α and β are the zeroes of the polynomial $5x^2 + 3x - 7$, then find $1/\alpha + 1/\beta$.
7. The zeroes of a polynomial $x^2 + px + q$ are twice the zeroes of the polynomial $4x^2 - 5x - 6$. Then find p.
8. If 1 is one zero of the polynomial $p(x) = ax^2 - 3(a-1)x - 1$, then find the value of 'a'.
9. If zeroes of $x^2 - kx + 6 = 0$ are in the ratio 3:2, find k.
10. For what value of k, $x^2 - 4x + k$ touches x-axis?
11. In a 2-digit number, the digit at the unit's place is 5 less than the digit at the ten's place. The product of the digits is 36. Find the number.
12. Using graphical method, solve the following system of equations:

$$3x + y + 4 = 0 \text{ and } 3x - y + 2 = 0$$

13. What will be the value of k for which the system of equations $3x - y + 8 = 0$ and $6x - ky + 16 = 0$ has infinitely many solutions.
14. The ratio of incomes of two persons A and B is $3 : 4$ and the ratio of their expenditures is $5 : 7$. If their savings are ₹15000 annually find their annual incomes.
15. A and B are two points 150 km apart on a highway. Two cars start with different speeds from A and B at the same time. If they move in the same direction, they meet in 15 hours. If they move in opposite direction, they meet in one hour. Find their speeds.

Subject Enrichment Activity

Few activities mentioned below. (To be done in the Lab Manual)

Activity no. – 2, 3, 6, 8, 9, 10, 11, 13, 14, 17, 18, 20

Steps of Activities: (i) Aims (ii) Materials required (iii) Procedure (iv) Observation (v) Conclusion

2. Make a working model based on the algebraic expressions with LED lights.
3. Make a working model based on real numbers.

NOTE: Kindly make one working model out of two.

SOCIAL SCIENCE

Part-1

I) Project Work (Choose One – 12-15 Pages)

1. Consumer Awareness: Focus on Consumer protection Act, the role of courts, and consumer awareness campaigns.

OR

2. Social Issues: Research gender, caste, regionalism, or economic disparities.

OR

2. Sustainable Development: Define the concept, list issues, importance, and discuss summits like Rio-de-Janeiro 1992.

II) Map Work Practice

Practice the maps of History and Geography as discussed in class and paste them neatly in your Social Science notebook using outline political maps of India.

Complete the following activities neatly and creatively:

History Map Work

Locate and label important places related to:

- Nationalism in India
- Indian National Congress Sessions
- Important centres of movements

Geography Map Work

Practice and label maps related to:

- Soil types
- Dams
- Major crops
- Minerals and energy resources
- Manufacturing industries
- Lifelines of national economy

Instructions:

- Use separate outline maps for each topic.
- Use proper colours, symbols and labels.
- Write map headings clearly.
- Maintain neatness and accuracy.
- Paste all completed maps properly in the notebook.

Part-2

III) Choose ANY ONE Presentation Format

Students may present their project in any one form:

1. Working Model
2. 3D Model
3. Poster Making
4. Chart Presentation
5. Infographic

History

1. Dandi March Model
 - Show Salt March with Gandhi and followers walking to the sea.
 - Use sand, blue paper, and clay figures.

2. Quit India Movement Scene
 - 3D model with freedom fighters, slogans, and British police.

Geography

1. Water Cycle Working Model
 - Use cotton clouds, blue water, and labels for evaporation, condensation, and precipitation.
2. Soil Types of India Model
 - Display different soils using real samples on a map of India.
3. Renewable Energy Village
 - Show solar panels, windmills, and biogas plants.
4. River Valley Project
 - Model of rivers like Ganga River with dams, irrigation, and farming.

Political

1. Indian Parliament Model
 - Create Parliament House with Lok Sabha and Rajya Sabha sections.
 - Fundamental Rights or Duties or Directive principles.
2. Three-Tier Government Pyramid
 - Explain local, state, and central government structure.
3. Election Process Working Model
 - Mock EVM machine and voting booth.

Economics

1. Sectors of Indian Economy
 - Divide into primary, secondary, and tertiary sectors using miniature scenes.
2. Banking System
 - ATM, bank counter, cheque system, and digital banking display.
3. Globalisation

Connect different countries with trade routes and product.

SCIENCE

Instructions:

- Complete all work neatly in a separate holiday homework notebook/file.
- Use colored pens/pencils wherever required.
- Revise all chapters regularly.
- Complete you
- Submit the homework after summer vacation.

PHYSICS

1. Prepare a working model/project on sources of energy or electricity.
2. Write and learn all formulas from the chapter Electricity.
3. Solve 15 numericals from Electricity chapter.
4. Make a chart on safety measures while using electricity.(R.no 1-10)

CHEMISTRY

5. Prepare a flowchart of different types of chemical reactions with examples on chart paper(R.no 11-20)
6. Write balanced chemical equations for 20 reactions.
7. Learn important definitions and chemical equations.

BIOLOGY

8. Draw and label diagrams of human
Digestive system,(R.no 21-30)
Respiratory system (R.no 31-42)
9. Prepare a healthy diet chart for a teenager.
10. Write 10 points on the importance of exercise and yoga.
11. Revise the chapter Life Processes thoroughly.

FUN ACTIVITY

- Plant a sapling and observe its growth for 15 days.(Bring it to school on 2 july)
- Maintain a small observation diary about your daily scientific observations.
- Watch one science documentary and write a short review.

ARTIFICIAL INTELLIGENCE)(417)

CBSE Curriculum Based

Topics Covered:

- Communication Skills
- Self-Management Skills
- Revisiting AI Project Cycle
- Modelling in AI Project Cycle

Instructions for Students

- Write all answers neatly in your notebook.
- Use proper headings and diagrams wherever required.
- Attempt all questions.
- Activity work should be done creatively.
- Maintain cleanliness and proper presentation in your notebook.

Section A – Communication Skills

Q1. Answer the following questions:

- (a) What is communication?
- (b) Differentiate between verbal and non-verbal communication.
- (c) Write any two advantages of effective communication.

Q2. Explain the following barriers to communication with one example each:

1. Physical Barrier
2. Language Barrier
3. Emotional Barrier
4. Cultural Barrier

Q3. Write short notes on:

- (a) Active Listening Skills
- (b) Importance of Body Language

© Feedback in Communication

Section B – Self-Management Skills

Q4. Define self-management. Explain any four self-management skills required by Students.

Q5. Answer the following:

(a) What is stress?(b) Mention any four stress management techniques.

© How does time management help students?

Q6. Differentiate between Self-Confidence and Self-Motivation:
Basis Self-Confidence Self-Motivation

Meaning

Importance

Example

Section C – Revisiting AI Project Cycle

Q7. Name and explain the five stages of AI Project Cycle with suitable examples.

Q8. Fill in the blanks:

- 1.The first stage of AI Project Cycle is _____.
- 2.Data collected in raw form is called _____.
3. The stage in which patterns are identified is called _____.
4. Testing of AI models is done during the _____ stage.
5. AI systems learn from _____.

Q9. Match the following:

Column A.

Column B

Problem Scoping

Finding the issue

Data Acquisition

Collecting information

Data Exploration

Understanding patterns

Modelling Creating AI solution

Evaluation. Checking accuracy

Section D – Modelling in AI

Q10. Answer the following questions:

(a) What is modelling in AI?

(b) Why is training data important in AI models?

© Differentiate between training data and testing data.

(c) Mention any two applications of AI modelling in daily life.

Activity-Based Questions / Case Study

Activity 1 – Communication and Self-Management Case Study

Riya is preparing for her board examinations. She attends online classes regularly but Gets distracted by social media notifications while studying. During group discussions,

She often interrupts others and does not listen carefully.

1. Identify any two communication mistakes made by Riya.
2. Suggest two ways by which she can improve her listening skills.
3. Which self-management skill is lacking in Riya?
4. Suggest any two techniques that can help her manage her time effectively.

Activity 2 – AI Project Cycle Case Study

A school wants to develop an AI-based system that can predict whether students may Require extra academic support based on attendance, test scores, and classroom Participation.

5. Identify the problem being solved in this case.
6. Which type of data will be collected for this project?
7. Name the stage of AI Project Cycle where data is collected.
8. What is the role of modelling in this project?
9. How will the school evaluate whether the AI model is working properly?

Creative Activity

Prepare a colourful chart or poster on any ONE of the following topics:

- Importance of Communication Skills in Daily Life
- Self-Management Techniques for Students
- Stages of AI Project Cycle
- Applications of Artificial Intelligence Around Us

(Use diagrams, pictures, and creative headings.)

ART AND CRAFT

● Mandala Art

◆ Materials to be used-

- Hard Board or MDF Board (anyone) (12x12 inch) (shape – square or round only)
- Fabric Colours
- Mirrors
- Fevicol
- Decorative Accessories





Happy Learning and Have a Wonderful Summer Vacation!