

MPVM GANGAGURUKULAM
HOLIDAY HOMEWORK
CLASS X(2026-27)
ENGLISH

Assignment 1

Read the book 'Wings of fire' by Dr APJ Kalam and answer the following questions in file sheets:-

- 1. Imagine you are young Kalam. Write a diary entry about your dreams and struggles.**
- 2. Write a letter to your friend explaining what inspires you most about Kalam's life.**
- 3. Create a motivational poster using Kalam's life lessons.**

Assignment 2

Read the book Animal farms by George Orwell and answer the following questions

in file sheets:-

- 1. Write a speech by Snowball defending his ideas.**
- 2. Imagine you are Boxer. Write a paragraph in 100-120 words about your life on the farm.**
- 3. Design a comic strip of Animal Farm.**

Assignment 3

Write a letter to the editor of an English daily in about 100-120 words, making a plea to the common people to switch over to solar energy to conserve environment and limit electricity bills.

Assignment 4

Art Integrated project*

Collect information about the religious faith of Arunachal Pradesh and Meghalaya. Paste/Draw relevant pictures and write about them.

Note: Do the given homework in file papers.

Assignment 5

Complete pages 23 -29 of ‘ Words and Expression 2’

HINDI

पाठ‘नेताजी का चश्मा’ के आधार पर बताइए कि एक छात्र होने के नाते आप अपने देश के प्रति किनकर्तव्यों का पालन करेंगे तथा देश के विकास में क्या योगदान देंगे? तीन उन कवियों का चयन कीजिए, जिन्होंने स्वतंत्रता आंदोलन में भाग लिया हो। उनका संक्षिप्त सचित्र परिचय लिखिए।

Culture

भारत में स्थित 12 ज्योतिर्लिंग का सचित्र वर्णन कीजिए।

MATHEMATICS

1. Parabolas Around You

Click pictures of parabolic shapes found in your surroundings, such as:

- Fountain
- Bridge
- Dish antenna

Relate each example to the standard equation:

$$y = ax^2 + bx + c$$

2. Real Numbers Family Tree

(i) Diagram

Draw a family tree of real numbers:

- Trunk: Real Numbers
- Branches: Rational Numbers and Irrational Numbers

(ii) Further Classification

Rational numbers include Integers, which further include Whole Numbers and Natural Numbers.

(iii) Real-Life Examples

Paste 3 real-life examples for each:

- Rational numbers (prices, fractions)
- Irrational numbers (π , $\sqrt{2}$)
- Natural numbers (roll numbers, counting numbers)

3. Linear Equations Activity

Write a story or dialogue where a pair of linear equations is used.

Solve the pair using:

1. Graphical Method
2. Substitution Method
3. Elimination Method

SCIENCE

PHYSICS

*Impact of Nuclear Energy in Solving the Energy Crisis

A balanced look at one of the most debated energy sources.

Core Research: The physics of Nuclear Fission ($E=mc^2$). Describe how a controlled chain reaction generates steam to turn turbines.

Data Element: A case study on India's Three-Stage Nuclear Power Programme (using Thorium).

File Highlight: A "Risk vs. Reward" analysis, discussing waste management and the high energy density of uranium compared to coal.

Suggested File Structure (For Boards)

To ensure the project meets educational standards, students should organize their files as follows:

Introduction: Define energy and the current global/national energy crisis.

Theory: The Physics principles behind the chosen energy source.

Experimental/Data Analysis: Graphs, tables, or home audits.

Environmental Impact: How this source affects the carbon cycle and global warming.

Conclusion: The student's personal take on the most viable solution for the future.(Your own opinion)

Bibliography: Citing books (like NCERT) and educational websites used.

CHEMISTRY:

Q1: Using household materials design your own useful products & explain the chemistry behind it. You can use easily available materials such as: • Lemon • Baking Soda • Vinegar • Soap solution • Salt • Turmeric etc. (or any other safe household items)

BIOLOGY:

1. Make a “**waste audit report**” under the following data:

a. Household profile:

- No. of members
- Duration of audit - 15 days

b. Data collection (daily weight or count):

Day-wise biodegradable (kitchen) and recyclable (plastic/metal)

2. Critical thinking questions:

- (a) What was the single most common item in your "Non-Recyclable" category?
- (b) Suggest one alternative product your family could use to eliminate that specific waste.

Action Plan:

Write a 50-word "Eco-Pledge" for household to reduce waste during the next school term.

Take photographs of your work and do the work in file pages.

3 . Prepare a portfolio on the topic management and conservation of natural resources.

Note: do all the work in file pages and paste relevant pictures and photographs of your work.

SOCIAL SCIENCE:

HISTORY AND CIVICS

GENERAL GUIDELINES: • All the topics must be done in the most creative, accurate and innovative manner • The activities must be done in the project files. • Usage of pictures and graphs is compulsory for the activities.

INTERDISCIPLINARY PROJECT

An Inter disciplinary project to be done on the following topic.

You are required to combine disciplines of Economics, History and Geography here. Topics to be combined are given below -

History – Making of Global World

Geography – Lifelines of National Economy

Economics – Globalisation and the Indian Economy

***Interdisciplinary Project Question**

Assess pros and cons of globalization: How have historical events, economic policies, and geography made the world a "global village"?

Design a timeline showing flows of goods, labor, and capital from pre-modern eras to Bretton Woods institutions (IMF/World Bank).

GEOGRAPHY (Sustainable development)

Topic- “India’s Strategy to Reduce Petroleum Dependence” Method- collect articles from different Newspapers, listen to the different podcast based on the same topic and summaries their views in your project. Collect information on the following mentioned topics:

- How countries depend on oil •
- Risks of overdependence
- Diversification into renewable sectors
- Biofuels (ethanol blending)
- Solar energy projects
- Government initiatives like National Solar Mission.
- Mention the different sources and links used to complete the project

Or

Economics

Consumer Rights

Topic- “Consumer Awareness in the Digital Age”

- Online shopping risks
- Cyber fraud and fake websites
- Safe digital practices
- Case Study / Examples
- Duties of consumers
- Redressal Mechanism

HISTORY

Project Title: “Voices of the Nation: A Museum-Style Project on Nationalism in India”.

Students have to collect the pictures of great leaders and create a mini museum through file pages.

Mix images, text, short writings and reflection to show how nationalism grew in India. Use map, newspaper style clipping to make it more real. That presents different “gallery rooms” focused on key themes of nationalism in India.

Core Objectives

Relate textbook events (Non-Cooperation, Civil Disobedience, Quit India, Khilafat, etc.) to real human stories, objects, and symbols.

Develop empathy by imagining themselves as participants in the freedom struggle. **“Make a wall of voices”- Slogans, and Symbols”**

Collect and display:

Slogans used in movements (e.g., “Swatantra Bharat”, “Do or Die”). Evolution of the national flag (tricolour stages).

- One side slogans other side flag evolution

Artificial Intelligence

CBSE Units: Unit 1 + AI Ethics

Task

Pick 1 app from this list: YouTube, Google Maps, Snapchat AI, Instagram Filters, ChatGPT
Do a 3-step ethics check and submit 2 pages.

Page 1: App Check Table

Fill this for your chosen app:

Check Point Your Answer Proof

1. App Name + What it does Ex: YouTube – Suggests videos Screenshot of home page

2. What data does it take? x: Watch history, location Check app Settings → Privacy

3. Does it ask permission? Yes/No. When? Screenshot of popup/terms

4. Bias Test Try any 2 things: Ex: Search “doctor” – see male/female pics? Search in Hindi vs English – same results? Write what you saw.

*5. My Rating (1 – 5 star) Consider following points to rate your App - Privacy, Fairness And write the reason , Why?

Page 2: Conclusion + Fix

Write these 4 points only:

1. Is it AI or Rule? Ex. 1 line – “YouTube is AI because it learns from my history.”
2. 1 Good Thing: Ex: “Helps me find study videos fast.”
3. 1 Problem: Ex: “Shows too many ads, less study content.”
4. My Fix for Company: Ex: “Add ‘Study Mode’ button with no ads.”
5. Reflection – 30 words: After this audit I learned AI must be and Use words: Fair, Transparent,

Safe

Submission Format

1. A4 sheets, handwritten
2. Cover page: Name, Class X, Roll No, AI Ethics Audit – App Name
3. Attach: 1-2 screenshots. Blur personal details.

OR

Design a Chart on the topic "Communication Skills". Cover following topics:

- a) Pros and Cons of various types of Communicatio
- b) Meaning and importance of Feedback
- c) Types of Feedback

Note: Use chart paper for this and submit it to subject teacher.

: Design Thinking & Innovation |

Topic: Poster Creation using Graphics (Digital Work Only)

Objective: To enhance students' communication skills, creativity, and digital design thinking by creating an impactful poster using graphic tools.

Task Instructions: Students are required to design a digital poster (NOT handmade/manual) using any graphic design software or app.

Theme (Choose Any One):

- Sustainable Living
- Importance of Mental Health
- Digital Safety & Cyber Awareness
- Save Water
- Clean India Mission

Guidelines:

- Use tools like Canva / PowerPoint / Photoshop / Pixlr / any graphic app
- A4 size layout (Portrait only)
- Include: Catchy Title, Graphics, Slogan, Good Colors
- Keep design clean and avoid overcrowding
- Do NOT copy directly from the internet

Communication Skills Focus:

- Clarity of message
- Creativity in presentation
- Audience awareness
- Visual appeal

Submission Details:

- Submit printed copy (A4 size)
- Bring soft copy (PDF/Image)
- Write Name, Class, Section on back

PHYSICAL ACTIVITY TRAINER

#ACTIVITIES TO BE PREPARED #

@WRITE DOWN IN YOUR NOTEBOOK

#Design 2-2 lesson plan on Volleyball and basketball skills.

Plan activity ideas for children.

Design an activity to develop passing or throwing skills for early stages children.

Prepare a schedule for any theme-based event assembly for 30 to 40 minutes.

List down the name and use of equipments name and their uses in daily life or in sports activities.