

D.A.V PUBLIC SCHOOL
SUMMER VACATION HOMEWORK (2026-27)
(CLASS-X)

Subjes	
हिंदी	<p>1. लेखक-कवि परिचय परियोजना</p> <p>1 क्षितिज से एक लेखक और एक कवि पर परियोजना तैयार करें : जीवन-परिचय, प्रमुख रचनाएं, भाषा-शैली, और एक पाठ/कविता का भावार्थ (3-4 पृष्ठ, चित्र सहित)।</p>
	<p>2. काव्य-भावार्थ एवं अलंकार</p> <p>2 क्षितिज से कोई दो कविताएं चुनें। प्रत्येक का भावार्थ लिखें और अलंकार (अनुप्रास, उपमा, रूपक, यमक, उत्प्रेक्षा, मानवीकरण) पहचानकर उदाहरण सहित लिखें।</p>
	<p>3. मिनी हिंदी समाचार-पत्र</p> <p>3 A या दो A शीट पर 'ग्रीष्म समाचार' नाम से मिनी अखबार बनाएं : एक मुख्य समाचार, संपादकीय, एक कविता, एक पहेली, एक विज्ञापन।</p>
	<p>4. व्याकरण — पाठ्यक्रमानुसार (CBSE)</p> <p>(अ) पद-परिचय : दिए गए वाक्यों में रेखांकित पदों का परिचय (संज्ञा/सर्वनाम/क्रिया/विशेषण/क्रिया-विशेषण) — 10 उदाहरण। (ब) वाच्य : कर्तृवाच्य → कर्मवाच्य / भाववाच्य में रूपांतरण — 8-8 वाक्य। (स) अलंकार : उपमा, रूपक, उत्प्रेक्षा, मानवीकरण — परिभाषा व 2-2 उदाहरण। (द) समास : तत्पुरुष, द्वंद्व, बहुव्रीहि, कर्मधारय — परिभाषा व 3-3 उदाहरण।</p>
	<p>5. लेखन-कौशल</p> <p>5 (अ) औपचारिक पत्र : प्रधानाचार्य को पुस्तकालय सुधार हेतु आवेदन। (ब) निबंध : 'पर्यावरण प्रदूषण और हम' (120-150 शब्द)। (स) सूचना लेखन : विद्यालय की वार्षिक पत्रिका हेतु रचनाएं आमंत्रित करने हेतु सूचना।</p>
<p>गृहकार्य के नियम एवं दिशा-निर्देश</p> <p>✓ सभी कार्य स्वयं करें — नकल बिल्कुल न करें।</p> <p>एक अलग, साफ गृहकार्य कॉपी में लिखें।</p> <p>नीली या काली स्याही का प्रयोग करें।</p> <p>प्रतिदिन थोड़ा-थोड़ा करें, अंत में जल्दबाजी न करें।</p>	

चित्र एवं रंग-सज्जा से गृहकार्य को सुंदर बनाएं।

काँपी पर नाम, कक्षा, अनुक्रमांक, दिनांक अवश्य लिखें।

सर्वश्रेष्ठ गृहकार्य को विद्यालय में प्रदर्शित किया जाएगा।

I. Literature: First Flight & Footprints Without Feet

Objective: To encourage deep reading and character analysis.

- **Character Sketch Scrapbook:** Choose any one characters from *First Flight* (e.g., Lencho from *A Letter to God* and two from *Footprints Without Feet* (e.g., Hari Singh).
 - Create a visual profile for each.
 - List three personality traits supported by evidence from the text.
- **Theme Mapping:** For the poem *Fire and Ice* create a visual mind map that connects the central theme to real-world examples.

II. Reading Skills

Objective: To improve comprehension and inference.

1. **The Editorial Analysis:** Collect five editorial articles from a national English daily (The Hindu, Indian Express, or Times of India).
 - Paste the article in your notebook.
 - Identify and write down five "New Vocabulary" words from each and find their synonyms.
 - Write a 50-word summary of each article.

III. Writing Skills

Objective: To practice formal formats.

1. **Letter to the Editor:** Write a formal letter to the Editor of a local daily drawing attention to the increasing "Digital Divide" in education, suggesting ways to bridge the gap.

IV. Applied Grammar

Objective: Reinforcement of Narration

- **Sentence Transformation:** Find 10 sentences from the chapter *The Thief's Story* and convert them from Direct to Indirect Speech.

V. Art Integration Project (Mandatory)

Topic: *Cultural Synthesis through Literature.*

Task: Design a "Travelogue Booklet" or a "3D Storybox" based on the chapter "Glimpses of India".

- **Option A (The Baker from Goa):** Create a colorful brochure showcasing the Indo-Portuguese culture. Include hand-drawn illustrations of the 'Pader' (baker) and their traditional equipment.
- **Option B (Coorg):** Create a collage that depicts the flora, fauna, and the martial traditions of the Kodagu people. Use natural materials like dried leaves or coffee beans for texture.
- **Option C (Tea from Assam):** Draft a "History of Tea" infographic on a chart paper, blending the legends (Chinese and Indian) mentioned in the book with sketches of tea gardens.

Suggested Presentation Format

- Use an **Hard Card board cover File with same size paper sheet** for the assignment.
- The Art Integration project should be separate, colorful, and highly visual.(same size of paper)
- Ensure the work is **handwritten** to improve calligraphy and writing speed for the upcoming Board exams.

Note: For the Art Integration Project, try to use eco-friendly or recycled materials to align with

English

	Sustainable Development Goals (SDG) often encouraged in the Class 10 curriculum.
Math	<p>As requested, Activity 1 (Euclid's Division Lemma) has been removed. The following five activities are selected from your laboratory manual for your holiday assignment. Please complete these in your project file, including the answers to the important questions provided for each.</p> <p>Activity 1: Graphs of Quadratic Polynomials</p> <ul style="list-style-type: none"> • Objective: To draw the graph of a quadratic polynomial and observe the shape of the curve, its direction based on the coefficient a, and its number of zeroes. • Method: Plot ordered pairs on graph paper and join them with a free-hand curve to form a parabola. <p>Important Questions: What is the geometric name of the shape formed by the graph of a quadratic polynomial? If the coefficient of x^2 is negative ($a < 0$), in which direction does the parabola open? How do you determine the number of zeroes of the polynomial by looking at its graph?</p> <p>Activity 2: Consistency of Linear Equations</p> <ul style="list-style-type: none"> • Objective: To verify the conditions for consistency or inconsistency of a pair of linear equations in two variables using a graphical method. • Method: Plot two lines and observe three cases: intersecting lines (unique solution), coincident lines (infinitely many solutions), or parallel lines (no solution). <p>Important Questions: What is the ratio condition for coefficients (a_1/a_2) that results in a unique solution? If a pair of linear equations is described as "dependent," what does that imply about its graph and number of solutions? Explain why parallel lines represent an inconsistent system.</p> <p>Activity 3: Completing the Square Geometrically</p> <ul style="list-style-type: none"> • Objective: To obtain the solution of a quadratic equation (e.g., $x^2 + 6x + 8 = 0$) by completing the square using geometric shapes. • Method: Use colored glazed paper to create a square of side x, rectangles for $6x$, and unit squares to physically complete a larger square representing $x^2 + 6x + 8$. <p>Important Questions: In the demonstration of $x^2 + 6x + 8 = 0$, what are the two algebraic solutions for x? Why is a negative value for x rejected in the context of this geometric activity? How can understanding quadratic equations help in fields like physics (e.g., projectiles)?</p>
Science	<p style="text-align: center;">Science(Biology)</p> <p>Q1. Activity: preparing a temporary Mount of a leaf peel to show stomata. Format: Aim, materials required, procedure, observation and precautions.</p> <p>Q2. Write 10 MCQs from chapter 1st and 2nd.</p> <p>Q3. Write 10 assertion and reason questions from chapter 1st, 2nd and 3rd.</p> <p style="text-align: center;">Science(Physics)</p> <p>Short Answer Questions</p> <ol style="list-style-type: none"> 7. Define Electric Potential. What is the SI unit of electric potential? 8. State Ohm's Law. Draw a V-I graph for an ohmic conductor. 9. What is Resistivity? List two factors on which the resistivity of a material depends. 10. How is an Ammeter connected in a circuit? Explain the reason behind its specific connection (series/parallel). 11. Differentiate between Resistance and Resistivity. Provide at least two points of difference. 12. Calculate the number of electrons constituting one Coulomb of charge. 13. Why is tungsten used almost exclusively for filament of electric lamps? 14. What is the equivalent resistance when two resistors of 6 ohm and 3 ohm are connected in parallel?

	<p>Long Answer Questions</p> <ol style="list-style-type: none"> Derivation of Series Combination: <ul style="list-style-type: none"> Show that the equivalent resistance (R_s) of three resistors R_1, R_2, and R_3 connected in series is given by $R_s = R_1 + R_2 + R_3$. In this combination, does the current remain the same or change across each resistor? Explain. Factors Affecting Resistance: <ul style="list-style-type: none"> Experimentally, how does the resistance of a conductor depend on its length and area of cross-section? A wire of length L and resistance R is stretched to three times its length. Calculate its new resistance assuming the volume remains constant. Circuit Analysis and Joule's Law: <ul style="list-style-type: none"> State Joule's Law of Heating and write its mathematical expression. An electric iron of resistance $20\ \Omega$ takes a current of $5\ \text{A}$. Calculate the heat developed in 30 seconds. Parallel Combination vs. Series Combination: <ul style="list-style-type: none"> Derive the formula for the effective resistance of three resistors connected in parallel. What are the advantages of connecting electrical devices in parallel rather than in series in a domestic circuit? Comprehensive Problem Solving: <ul style="list-style-type: none"> A circuit consists of a 6V battery connected to a series combination of a 2 ohm resistor and a 4 ohm resistor. <ul style="list-style-type: none"> (a) Calculate the total resistance of the circuit. (b) Calculate the total current flowing through the circuit. (c) Determine the potential difference across the 4 ohm resistor. Project work Topic: Combination of Resistance Under this topic, Prepare and submit an electric decorative light (electric jhalar) using LED bulbs based on the concept of combination of resistance. The length of the decorative light should be between 3 to 5 meters.
Social Science	<ol style="list-style-type: none"> Activity-Do the plantation either in the pot Or on the ground near to your home. While doing the plantation, photos should be colour print with the students name. The plantation should be done in school uniform only. You have to plant any fruit Or tree sapling. Prepare a small chart paper with the slogans related Van Mahotsav Or Environment Day. Compare India and Sri Lanka on the basis of indicators of Human Development Index for 2004. (Fair N.B.) Explain any five different categories of existing plants and animal species based on the International Union for Conservation of Nature and Natural Resources with examples. (Scrab N.B.) “The changing status of Women in 20 th century-causes and effects” Write an article on the above-mentioned topic illustrating with suitable Source examples, The article should cover examples from both Indian and world history. You have been provided with examples of the sources. (Fair N.B.) Find out more about nationalist symbols in countries outside Europe. For one or two countries, collect examples of pictures, posters, poems, stories or music that are the symbol of nationalism and paste / scrap book. Prepare an extensive Comparison Table of Energy Resources used in India. (Include conventional, non conventional, potential and stock resources) (Fair N.B.) Write an article about Effects of Pandemic on Migrant Labourers Throughout India in about 500 words. (In your article describe any two case studies where government or non government organisations have extended any help to them.) (Fair N.B.) Make an Atlas of political map label and use different symbols :(Do it on scrap notebook) <ol style="list-style-type: none"> LIST OF MAP ITEMS History Nationalism in India <ol style="list-style-type: none"> Congress sessions: 1920 Calcutta• 1920 Nagpur• 1927 Madras session 3 Satyagraha movements: Kheda•Champaran• Ahmedabad mill workers

II.	JallianwalaBagh IV. Dandi March
Geography Resources and Development Identify Major Soil Types Water Resources Locating and Labeling:	
Salal•BhakraNangal•Tehri•RanaPratapSagar•SardarSarovar•Hirakund•NagarjunSagar•Tuhgabhadra	
• Agriculture Identify: Major areas of Rice and Wheat• Largest/Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and• Jute	
Minerals and Energy Resources Identify: a. Iron Ore mines Mayurbhanj•Durg•Bailadila• Bellary•Kudremukh• b. Coal Mines Raniganj•Bokaro•Talcher•Neyveli• c. Oil Fields Digboi•Naharkatia• Mumbai High•Bassien•Kalol•Ankaleshwar•	
Locate and label: Power Plants a. Thermal Namrup•Singrauli•Ramagundam• b. Nuclear Narora•Kakrapara•Tarapur•Kalpakkam•	
Manufacturing Industries I. Manufacturing Industries (Locating and labeling only) Cotton textile Industries: a. Mumbai, b. Indore, c. Surat, d. Kanpur, e. Coimbatore	
Iron and Steel Plants: a. Durgapur, b. Bokaro, c. Jamshedpur, d. Bhilai, e. Vijayanagar, f. Salem	
Software technology Parks: a. Noida, b. Gandhinagar, c. Mumbai, d. Pune, e. Hyderabad, f. Bengaluru, g. Chennai, h. Thiruvananthapuram	
Lifelines of National Economy Locating and Labeling:	
a. Major Sea Ports Kandla• Mumbai•Marmagao• New Mangalore• Kochi•Tuticorin• Chennai• Visakhapatnam•Paradip•Haldia•	
b. International Airports Amritsar (Raja Sansi-Sri Guru Ram Dasjee)• Delhi (Indira Gandhi)• Mumbai (ChhatrapatiShivaji)• Chennai (MeenamBakkam)• Kolkata (NetajiSubhash Chandra Bose)• Hyderabad (Rajiv Gandhi)•	
9. Make a Concept map of the given Chapters	
CH. 1. HIST THE RISE OF NATIONALISM IN EUROPE	
CH. 1. GEOG RESOURCE AND DEVELOPMENT	
CH.1.ECO DEVELOPMENT	
CH.1.DEMO.POLI. POWER SHARING (FROM EACH CH. AT LEAST 5-6 CONCEPT MAP SHOULD BE THERE ,DO IT ON A4 SIZE PAPER, USE COLOURS TOO)	

Instructions -

- i) Keep your work neat and clean.
- ii) Complete work in a separate notebook.
- iii) Revise daily.

Coordinator