



DELHI PUBLIC SCHOOL, PAKUR (JH)

















Dear Students,

Vacations are the most attractive and desirable part of school life! It is time again for a fun filled and relaxing summer break. However, during the scorching summer month, when you are locked up inside your homes, time must be spent meaningfully and interestingly. Keeping this in view, we have assigned Holiday Homework for you so that you remain connected with your studies. Also have lots of fun by pursuing your hobbies and enjoying yourselves with the family.







SUGGESTED DO'S IN SUMMER BREAK:

✓ Do's:

-  • Have Fun with your family at home.
-  • Try to engage yourself with some indoor games.
-  • Try to develop a kitchen garden on your own with the help of your parents.
-  • Try to indulge in your hobby like music, dance, painting, collection of leaves, making kites, etc.
-  • Eat healthy and nutritious food and drink lots of water and hydrating liquids.
-  • Eat Vegetables and one Fruit minimum every day.
-  • Wash your hands with soap, before and after taking food.
-  • Give some time to your grandparents. Find out about your family tree, roots and culture from them.
-  • Get up early and go for jogging everyday with your Papa and Mummy or Grand Parents.
-  • Help your parents in doing their house hold work.
-  • Read Newspaper if possible in English every day.
-  • Learn how to make minimum 3 dishes at your home from your mummy (Not for Nur To class II).
-  • Make a rough N.B. Learn and write 5 typical words of English their meaning and their usages.
-  • To improve your handwriting kindly write one page of English and Hindi cursive Handwriting.
-  • Complete your holiday Home work in a very neat and clean Handwriting.
-  • Trim your Hair and Nails at regular Interval.



✗ Don'ts:

-  • Consume oily and junk food.
-  • Spend too much time with computer and mobile games.
-  • Lend your note books/books to others.
-  • Waste your time roaming here and there in scorching heat.



Note:-

- This Holiday Home Work will be taken into consideration as a subjective enrichment activity. Hence, everyone is mandatory to submit the assignments after the reopening of the school.
- The summer vacation commences from **15th May 2026** to **14th June 2026**. The School will re-open on **15th June 2026** with summer timings i.e. **7:00 a.m. to 1:00 pm** till further notifications.



HAPPY HOLIDAYS

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Theme:-Transportation -Lifeline of Economy

Class-X

ENGLISH

1) Air transport acts as a "lifeline" for global trade.

With the help of the above clue , write an analytical paragraph on how cargo planes deliver essential goods (like medicine or tech) that keep the economy moving. (Project File)

2)Poetry Slam: "The Road Not Frozen" (A4 size colourful papers)

Write a poem about how transportation "thaws" a frozen economy by bringing supplies to remote, snowy areas, bringing a "change of mood" to a struggling town.

*The Concepts (What to write about)

The "Ice": Use "Ice" or "Snow" to represent a town where businesses are closed, people have no jobs, and supplies are running low.

The "Thaw": Use the sound of an engine or the sight of a road being cleared as the "Dust of Snow" moment that changes the town's mood.

The "Economy": Mention items being transported-medicine, fresh food, or fuel-that represent the "Lifeline" of the economy.

3)Create a travel brochure for the " *Express to Lucknow."

* Highlight how the Indian Railways network is the backbone of the economy, moving millions of workers and goods daily.

*The Components (What to include)

The Route Map: On the front or inside panel, draw a simple map showing a train line connecting a small town to a major hub like Lucknow. Label key "Economic Stops" with photos (e.g., Industrial Zone, Agricultural Mandi, Worker Housing).

The "Backbone" Section: Write a paragraph explaining that the railway is the "Lifeline of the Economy" because:

*It transports labor (people like Hari Singh looking for work).

	<p>*It moves goods (food, coal, raw materials) cheaply.</p> <p>*It connects remote areas to big city markets.</p> <p>The Character Connection: Include a "Traveler's Testimonial" from the perspective of Hari Singh. He could talk about how the 10:30 Express to Lucknow was his only "transportation to a new life."</p> <p style="text-align: center;"><u>Hint for the Visual Layout of the Brochure :-</u></p> <p>An A4 sheet is to be folded into three parts (a tri-fold brochure):</p> <ol style="list-style-type: none"> 1. Panel 1 (Cover): A catchy title like "The Lucknow Express: Connecting Dreams & Trade" with a picture of a steam or electric engine. 2. Panel 2 (Inside): The "Map Work" showing the escape route and economic significance. 3. Panel 3 (Back): Facts about Indian Railways (e.g., "Did you know the railways are the largest employer in India?").
HINDI	<ul style="list-style-type: none"> • कार्य 1: लेखन कार्य <ol style="list-style-type: none"> 1. विषय: "परिवहन क्यों कहलाता है अर्थव्यवस्था की जीवन रेखा?" (150-200 शब्दों में अपना विचार लिखें।) <ul style="list-style-type: none"> • कार्य 2: विज्ञापन लेखन <ol style="list-style-type: none"> 1. "पर्यावरण के अनुकूल परिवहन" को बढ़ावा देने के लिए एक विज्ञापन लिखें। (जैसे: साइकिल, ई-रिक्शा, इलेक्ट्रिक वाहन) 2. एक आकर्षक विज्ञापन बनाइए:- विषय: "सुरक्षित और तेज़ परिवहन" (इसमें चित्र, रंग और एक स्लोगन शामिल करें) <ul style="list-style-type: none"> • कार्य 3: सर्वेक्षण कार्य <ol style="list-style-type: none"> i. अपने परिवार या आस-पड़ोस के 10 लोगों से पूछें:- ii. रोज़ किस परिवहन साधन का उपयोग करते हैं? iii. क्यों वही साधन चुनते हैं? iv. अगर आपके क्षेत्र में परिवहन की सुविधा न हो तो क्या समस्याएँ होंगी? (उत्तर को तालिका में लिखें और निष्कर्ष निकालें।)
SANSKRIT	<p><u>COMPLETE ANY THREE ACTIVITIES</u></p> <p>1. संस्कृत-श्लोक-संग्रहः</p>

	<p>Write any two Sanskrit shlokas or slogans related to nature/environment and explain them in Hindi/English.</p> <p>Example:</p> <p>"माता भूमिः पुत्रोऽहं पृथिव्याः ।"</p> <p>Meaning: Earth is our mother and we are her children.</p> <p>2. अनुच्छेदलेखनम् Write a short paragraph (8-10 lines) in Sanskrit on:</p> <p>"स्वच्छपर्यावरणस्य महत्त्वम् "</p> <p>3. Practical Activity Plant a sapling near your house/school and paste its photograph in the project file with 4-5 Sanskrit sentences.</p> <p>4. Creative Thinking Activity Write about a real-life situation where intelligence is more useful than strength.</p> <p>Title: "बुद्धेः महत्त्वम् "</p>
<p>SCIENCE</p>	<p><u>Chemistry</u>:-Prepare a PPT on "Acids and bases in everyday life"</p> <p><u>Biology</u>:- Write a report with available Data and photographs on recent advancements in genetics and cloning.</p> <p><u>Physics</u>:-1. Safety and Visibility in Infrastructure Transport infrastructure consists of fixed installations like roads, railways, and seaports. Light plays a critical role in the safety of these terminals.</p> <p>Rear-View Mirrors in Logistics: Activity: Observe the side mirrors of various transport vehicles (trucks, buses, or cars). Question: Identify why convex mirrors are used as rear-view mirrors in the "movement of humans and goods". Diagram: Draw a ray diagram showing the formation of an image by a convex mirror when an object is at a finite distance.</p>

Searchlights and Headlights:

Analysis: Modern transportation requires powerful lighting for "operations". Explain the position of the light source in a concave reflector to produce a parallel beam of light.

Application: How does this design prevent transportation from "going wrong" and "negatively colouring our day" during night travel?

2. Refraction in Maritime and Pipeline Transport

Modes of transport include water and pipelines. The behaviour of light through different media is essential for underwater inspections and pipeline monitoring.

The Apparent Depth of Waterways:

Scenario: A technician is inspecting a fixed installation in a waterway. If the actual depth of a canal is 4 meters and the refractive index of water is 1.33, calculate the apparent depth as seen from above.

Concept: Explain why the bottom of a clear water tank at a refuelling depot appears raised.

Refractive Index and Speed of Light:

Calculation: If the speed of light in a glass lens used in a ship's telescope is 2×10^8 m/s, calculate the absolute refractive index of that glass (Speed of light in vacuum = 3×10^8 m/s).

3. Creative Project: "The Vision of Trade"

Transport enables trade, which is essential for the development of civilizations.

Task: Create a poster on an A4 sheet titled "Optics: Making Transport Safer."**Requirements:**

Label a diagram of a vehicle's headlight (concave mirror) and a side-view mirror (convex mirror).

Write a brief note on how the Lens Formula helps in designing high-quality cameras for "infrastructure" monitoring at airports and railway stations.

Include a "Note on Improvements" similarly to how Indian Railways makes advancements, focusing on the transition from traditional bulbs to LED-based optical systems.

Learning Objectives:

To create awareness about the importance of optical safety in the "lifelines of a nation".

	<p>To apply the laws of reflection and refraction to the fixed installations of the global economy.</p> <p>Resources: Refer to your NCERT Science textbook (Chapters on Light).</p> <p>Physics Holiday Homework 2: Solve the questions from the topic light from NCERT.</p>
<p>SOCIAL SCIENCE</p>	<p style="text-align: center;"><u>HISTORY NATIONALISM IN INDIA</u></p> <p style="text-align: center;"><u>Activity 1: Transport Survey</u></p> <p>Conduct a survey of 10 families in your locality and prepare a table showing:</p> <ul style="list-style-type: none"> • Most commonly used transport • Purpose of travel • Problems faced during travel <p>Write a short conclusion based on your findings.</p> <p style="text-align: center;"><u>Activity 2: Poster Making</u></p> <p>Prepare a colourful poster on the topic: “Transport and Communication: Lifelines of the Nation” Use slogans, drawings, and creative ideas.</p> <p style="text-align: center;"><u>Activity 3:</u></p> <p>Make a project file on the topic Consumer Rights (Roll no-1to12) OR Social Issues (Roll no-13to28) OR Sustainable Development(Roll no 29to 33) Expected Checklist:</p> <ul style="list-style-type: none"> • Introduction of topic/title • Identifying the causes, consequences and/or remedies • Various stakeholders and effect on each of them • Advantages and disadvantages of situations or issues identified • Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file • Presentation and writing that is succinct and coherent in project file • Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

	<p>List of areas to be located/ labeled/ identified on the map</p> <p>I. Congress sessions: • 1920 Calcutta • 1920 Nagpur • 1927 Madras session</p> <p>II. Satyagraha movements: • Kheda • Champaran • Ahmedabad mill workers</p> <p>III. JallianwalaBagh</p> <p>IV. Dandi March</p> <p>Locating and Labeling</p> <p>Major Sea Ports-</p> <p>• Kandla • Tuticorin • Mumbai • Chennai • Marmagao • Visakhapatnam • New Mangalore • Paradip • Kochi</p> <p>International Airports</p> <p>• Amritsar (Raja Sansi-Sri Guru Ram Das ji) • Delhi (Indira Gandhi) • Mumbai (ChhatrapatiShivaji) • Chennai (Meenambakkam) • Kolkata (Netaji Subhash Chandra Bose) • Hyderabad (Rajiv Gandhi)</p>
<p>HEALTH AND PHYSICAL EDUCATION (HPE)</p>	<ol style="list-style-type: none"> 1. Development of Physical Culture in India and Its Social Impact 2. Health, Fitness and Wellness: Essential Elements of Human Life 3. Significance of Yoga in Daily Life