



VIKAS BHARATI PUBLIC SCHOOL

SESSION: 2026-2027

CLASS X

HOLIDAY HOMEWORK

Welcome to the Holiday Homework Adventure!

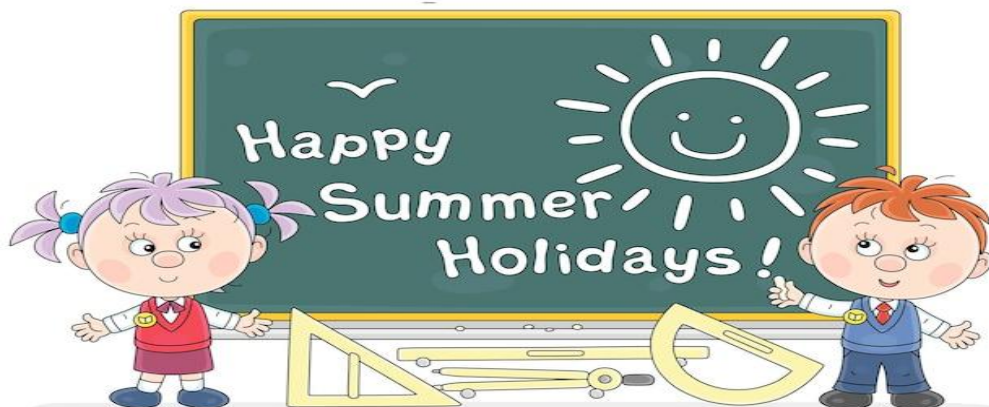
This packet is your gateway to a meaningful summer—one filled with discovery, creativity, and growth. Whether you're diving deep into the wonders of science, unravelling the layers of history, solving challenging math puzzles, or weaving tales in English, this homework is designed to ignite your mind and expand your horizon.

As you work on each subject:

- **Think independently – Reflect before you respond.**
- **Be curious – Ask questions, research, and go beyond the textbook.**
- **Stay creative – Present your work beautifully with visuals and original ideas.**
- **Grow stronger in concepts – Practice and revise regularly.**
- **Explore beyond the classroom – Apply what you learn to real life.**



Take breaks from screens; enjoy nature and family time. Organize your work using folders or files for each subject. May your summer be sunny, stimulating, and successful!



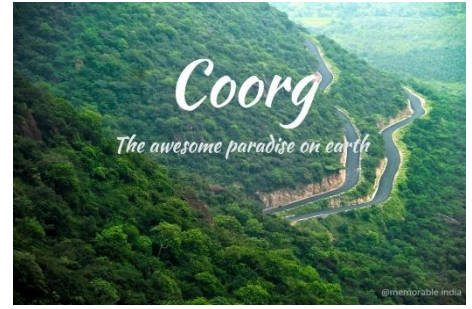
ENGLISH

1. Portfolio

Adventure Sports "Z-Fold" Brochure

Since Coorg is a hub for high-energy adventures, create a travel brochure.

The Task: Fold an A4 sheet into three parts (Z-fold).



Creative Twist: Dedicate each panel to a different activity: On the first fold, paste pictures related to River Rafting and write some content. On the second fold, do the same for Rock Climbing. On the third fold, write a Diary Entry of 100 - 150 words imagining that you visited Coorg, write the highlights of that place.

Use bright water colours to depict the Kaveri river.

The Content: Write catchy slogans for each sport.

For example: "Conquer the Kaveri: White Water Rafting in the Heart of Coorg."

Also, write some facts related to the lesson Coorg in the brochure

Keep the brochure in a folder 📁.



2. Multiple Assessment Activity

Make a document related to the poems either Dust of Snow or Fire and Ice ❄️. Paste pictures 🌈 🌟 🌠 and explain the main highlights of the poem. Use coloured A4 size sheets for the activity. Keep them in a folder 📁.

3. SHARP INSIGHTS

Tenses

Page Numbers

226,227,228

Subject Verb Agreement

Page Numbers

239,240

Unseen Passages (Reading Comprehension) 1 and 2

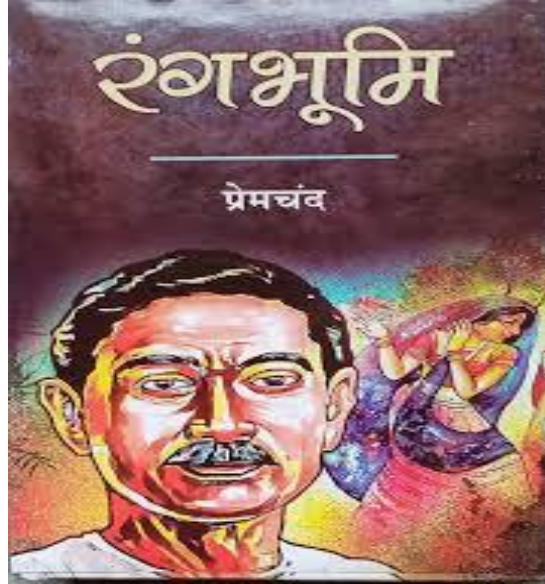
HINDI

● बहुविध आंकलन कार्यकलाप (5 अंक)

1. 'स्पर्श' पुस्तक, पाठ - 'बड़े भाई साहब' में निहित मुहावरों पर आधारित (5 अंक)

विवरण:- पाठ - 'बड़े भाई साहब' में निहित मुहावरों में-से कोई 10 से 12 मुहावरे चित्रात्मक रूप में A-3 साइज़ शीट पर 3-D रूप में चिपकाएँ और उसी शीट पर दूसरी तरफ़ उन्हीं मुहावरों का प्रयोग करके लगभग 100 शब्दों में लघुकथा लिखकर लाएँ।

2. मुंशी प्रेमचंद द्वारा रचित उपन्यास - 'रंगभूमि' पढ़कर समीक्षा लिखें तथा किसी भी एक पात्र को जीवंत करते हुए, एक प्रभावशाली एकल मंचन की props के साथ प्रस्तुति दीजिए। (यह कार्यकलाप ग्रीष्मावकाश के पश्चात कक्षा में लिया जाएगा, जिसके पाँच अंक निर्धारित होंगे।)



● पोर्टफोलियो:- (5 अंक)

कार्यपत्रिकाएँ। (कक्षा के WhatsApp समूह में भेजी गई कार्यपत्रिकाओं को हल करें।)

नोट :- 'पोर्टफोलियो' गतिविधि के अंतर्गत अन्य कार्यकलाप कक्षा में ही करवाए जाएँगे।

MATHEMATICS

1. PROJECT

Topic: Real-Life Applications of Algebra & Statistics

🌟 Objective

To understand how Algebra (linear equations & graphs) and Statistics (mean, median, mode) are used in real life through observation, data collection, and analysis.

📌 Project Guidelines

Page 1 – Cover Page

Title: Real-Life Applications of Algebra & Statistics

Student Name, Class & Section

Subject: Mathematics

School Name , Roll Number

👉 Make it creative and colourful.

Page 2 – Index Page

Properly list all sections with page numbers.

Page 3 – Introduction

Write 8–10 lines on:

Importance of Algebra and Statistics in daily life

Where we use data and equations?

📖 Main Content (Page 4 to Page 13)

◆ Section 1: Linear Equations in Daily Life (Page 4–6)

Choose any 3 situations for example: Shopping (Total cost = price \times quantity) , Taxi fare (fixed + per km) , Mobile recharge plans.



👉 For each Situation write equation formed , solution , explanation (3–4 lines)

◆ Section 2: Graphs in Real Life (Page 7–9)

Draw at least 2 graphs:

Examples: Temperature vs Time , Distance vs Time , Expenses over a week



👉 Include:

Graph (on graph paper) , Proper labels & scale , Title , Interpretation (2–3 lines)

◆ Section 3: Statistics in Daily Life (Page 10–12)

Collect real data (very important ✓)

Examples of data: Marks of 10 students , Daily temperatures for 7 days , Daily expenses , Number of hours studied



👉 Calculate:

Use the formulas and calculate Mean , Median , Mode

👉 Show: Raw data (table form), Mean, Median, Mode calculations, 2–3 line conclusion (What do these values tell you?)

◆ Section 4: Case Study / Activity (Page 13)

Choose one:

✓ Compare study hours of a week → find mean

✓ Compare marks of friends → find median

✓ Find most common temperature → mode

👉 Write data , do calculations , plot graph (optional) and then give conclusion.

📄 Page 14 – Reflection

Write: 👉 “What new concepts did I learn from this project?” (6–8 lines)

Important Instructions

✓ Neat handwriting

✓ Use colours and borders

✓ Keep file clean and attractive

✓ Use proper labels

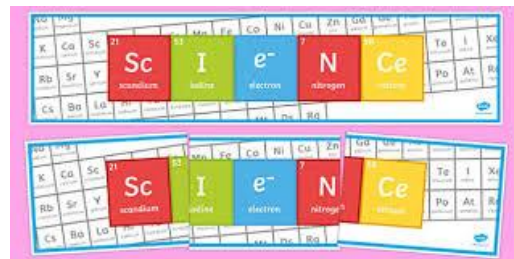
1. Complete all lab activities given in revision booklet.
2. Complete the revision booklet questions of following chapters
Ch 2 – Polynomials
Ch 3 – Pair Of Linear Equations In Two Variables
Ch 8 – Trigonometry

SCIENCE

Chapter: Periodic Classification of Elements (Chemistry)

The "Periodic Trend" Infographic:

Using an A3 sheet, draw a simplified periodic table and use colourful arrows to show how properties change.



- **Atomic Size:** Increases down a group, decreases across a period.
- **Metallic Character:** Increases down a group, decreases across a period.
- **Valency:** Increases then decreases across a period.

Chapter: Electric Effects of Electric Current (Physics)

A. The "Energy Detective" Digital Concept Map:

Instead of a static chart, students can create an interactive digital concept map using tools like Mind Meister, Canva, or Miro.

The Task: Trace the journey of Joule's Law of Heating through their own home.

Core Nodes:

1. The Essentials: How a geyser or iron uses high-resistance alloys (like Nichrome).
2. The Safety Net: The physics of a fuse wire—why a low melting point is a life-saver.
3. The Evolution: Compare the heat wastage in an old incandescent bulb vs. the efficiency of an LED.
4. The Future: How heating effects are managed in high-speed laptop processors or EV batteries.

Each Student needs to prepare 3 to 5 slides (max.) and submit it's print out to Physics teacher by 10th July 2026.

B. Solve the assignment questions shared in your class group neatly in Physics register.

Chapter: Heredity and Evolution (Biology)

The Core Concept Map (Handwritten)

Using keywords, flowcharts, and diagrams, map out the following "Nodes":

- **The Father of Genetics:** Mendel's experiments with Pea plants (*Pisum sativum*). Draw the **Monohybrid Cross (F1 and F2 generations)** with the phenotypic ratio 3:1.
- **The Mechanism:** Define Gene, Allele, Dominant vs. Recessive traits, and Genotype vs. Phenotype.
- **Sex Determination:** A clear flowchart showing how sex is determined in humans (XX and XY chromosomes).

SOCIAL SCIENCE

✚ Every student has to compulsorily undertake **any one** project on the following topics:

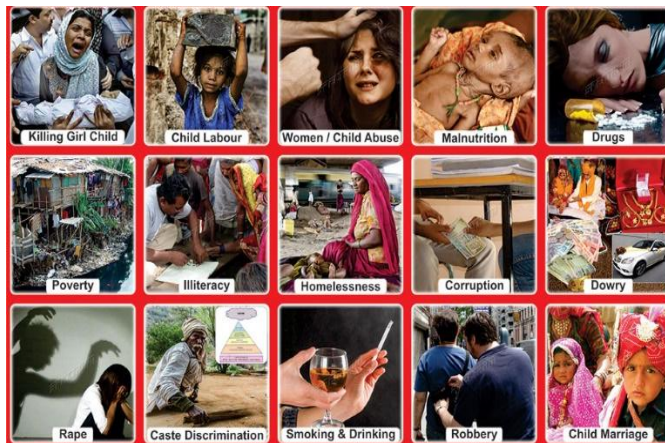
1) CONSUMER AWARENESS

(Refer Ch-5 of Economics N.C.E. R.T book)



OR

2) SOCIAL ISSUES (Take any 1 or 2 social issues in detail)



OR

3) SUSTAINABLE DEVELOPMENT



IMPORTANT INSTRUCTIONS:

1. The project work will be of **5 marks**.
2. This project is **compulsory for all**.
3. Marks of this project will be added in the **finals**.
4. The total length of the project report will be **15-20 pages, with 10 compulsory pages**.
5. The project report will be **handwritten**.

8. The project should include:

- ❖ **COVER PAGE** - Creative Design and Project Topic
 - ❖ **STUDENT PROFILE** (Your name, class, roll.no., school name, Academic year, Passport size photo etc)
 - ❖ **INDEX** (All topics and sub topics)
 - ❖ **ACKNOWLEDGEMENT** (People who have helped/inspired you for this project)
 - ❖ **INTRODUCTION** (Brief outline of the topic chosen)
 - ❖ **PREFACE** (Reason for choosing your topic and varied fields you would be touching upon)
- IN BEGINNING**



- ❖ **MAIN BODY** (The core content of the topic chosen including case study)
 - There should be at least **8-10 pages**.



- ❖ **GLOSSARY** - An alphabetical list, with meanings, of the words or phrases used in the project that are difficult to understand.
 - ❖ **CONCLUSION** (Your understanding/views and suggestions)
 - ❖ **BIBLIOGRAPHY** (Mention all your reference points/sources)
 - ❖ **TEACHER REMARKS** – Give heading and leave the page for teacher remarks.
- AT LAST**

ARTIFICIAL INTELLIGENCE

PART D

Project Work/Field Visit

15 MARKS

Guidelines for submitting the project

- Students need to explore and create the machine learning project in Teachable Machine Platform (link given below) <https://teachablemachine.withgoogle.com/>

Select any one category for your AI model:

- Healthy Food vs Junk Food
- Masked vs Unmasked Faces
- Recyclable vs Non-Recyclable Waste

Youtube Tutorial Links

<https://www.youtube.com/watch?v=DFBbSTvtpy4>

<https://www.youtube.com/watch?v=CO67EQ0ZWgA>

<https://www.youtube.com/watch?v=n-zeeRLBgd0>

1. The project file should include the **cover page (including name, class, sec, roll. no., subject), screen shots** of the project and its functioning (4 screenshots adjusted on two pages)
2. Printout of the project file needs to be submitted.
3. Project file would be judged on the following criteria
 1. **Content**
 2. **Creativity**
 3. **Presentation**
 4. **Originality**

INFORMATION TECHNOLOGY

Guidelines for the project

- Students need to explore and create the machine learning project in Teachable Machine Platform (link given below) on any innovative theme/topic of their choice (printouts are not required to be submitted)

<https://teachablemachine.withgoogle.com/>

Youtube Tutorial Links

<https://www.youtube.com/watch?v=DFBbSTvtpy4>

<https://www.youtube.com/watch?v=CO67EQ0ZWgA>

<https://www.youtube.com/watch?v=n-zeeRLBgd0>

ART & CRAFT

Create a Cement Pottery

Make one Pot with cement/POP .

Refer the following YouTube links for the same.

1. <https://youtu.be/6JOW3nMHHSs?si=XtDRYbPoVVnZldR6>
2. <https://youtu.be/u6J46cH3jVo?si=jRBUbAN0f0zpEQM5>
3. <https://youtu.be/Kag71T6XDvY?si=YuS9JgAdje1Edl5q>