SUMMER VACATION HOLIDAY HOMEWORK 2025-26 CLASS- X

ENGLISH

Formal Letter Writing (To be done in Grammar Copy)

1. Complaint with a Twist - Letter to a Fairy Tale Authority

Task: Write a formal letter of complaint to a fictional authority (e.g. 'Department of Magical Services') about a fairy tale issue.

Example: "The Three Bears" complaining about Goldilocks' behavior.

- Maintain formal tone
- State issue, suggest solutions
- Add illustrations and a touch of humor

Tenses Activity:

2. Tense File – 12 Tenses, 12 Pages

Task: Make a file showing all 12 tenses with the following:

- Name of the tense
- Structure (positive/negative/interrogative)
- 1 example sentence
- 1 illustration or mini-situation (drawing or photo)
- Use visuals and different colors to highlight tense use
- Decorate the page with grammar tips, tense markers, and verb tables for reference.

HINDI

प्रश्न-1 ''ग्रीष्मकालीन अवकाश के दौरान आपने जो प्रमुख गतिविधियाँ कीं, उन्हें कर्तृवाच्य, कर्मवाच्य, और भाववाच्य रूप में प्रस्तुत कीजिए। प्रत्येक वाक्य के माध्यम से उस गतिविधि के बारे में अपने अनुभवों को व्यक्त कर एक कोलाज तैयार कीजिए।

प्रश्न-२ 'माता का अँचल' पाठ के आधार पर अपनी स्मृतियों को सँजोते हुए 150 शब्दों में एक आलेख लिखिए।

PHYSICS

Q1 A student wants to find the equivalent resistance of three resistors of 6 ohm, 3 ohm, and 2 ohm connected in (a) series and (b) parallel. Draw a labeled circuit diagram for both cases. Show step-by-step calculation of the equivalent resistance. If the battery used is 6V, calculate the current flowing in each case.

Q2 Activity: Make Your Own Simple Electric Circuit at Home

Objective: Understand the concept of current, voltage, resistance, and how a circuit works.

Materials Needed (All household items or easily available): 1 battery (AA or 9V) 1 small bulb (torch bulb or LED) 2 wires (or foil strips) 1 switch (or use a paperclip as a manual switch) Electrical tape or glue (optional) A cardboard/paper base to mount it on Steps:

- 1. Connect one end of wire to the positive terminal of the battery.
- 2. Connect the other end of this wire to one side of the bulb.
- 3. Connect the second wire from the other side of the bulb to the switch.

- 4. Complete the circuit by connecting the switch back to the negative terminal of the battery.
- 5. Turn the switch on/off to see how current flows and lights the bulb.

Activity Questions (To be written in notebook):

- a) Draw a neat labeled diagram of your circuit.
- b) Explain how current flows in your setup.
- c) What happens when you remove the switch or break a connection? Why?
- d) Suppose you replace the bulb with another of higher resistance what do you expect?
- e) How does this relate to real household circuits?

CHEMISTRY

- 1) Make list of chemical reactions going on in our surroundings. Write them in balanced chemical equations. Also mention its types.
- 2) Make a mind -map of chapter-1 and complete all in text questions and activities .

BIOLOGY

1. Concept Map: Life Processes

Create a concept map of the chapter 'Life Processes '.

- Include Nutrition, Respiration,
- Use flowcharts, arrows, and labeled diagrams
- Highlight key organs and their functions

Draw a well-labeled diagram /poster of the human digestive system.

- Label all parts
- Mention the function of each organ
- Include a short write-up (50–70 words) on the digestion process

2. Research-Based Tasks

Health & Diet Plan - A Balanced Diet Plan

Make a balanced diet chart for a teenager.

- Include essential nutrients: carbohydrates, proteins, fats, vitamins, and minerals
- Mention the benefits of each nutrient
- Use creative formatting (table, visuals)

MATHS

Chapter 1: Real Numbers

Topic: HCF and LCM using Prime Factorisation

Activity Title: Prime Puzzle – Crack the HCF & Dy LCM Code

Instructions:

- 1. Everyone have to selects two numbers between 20 and 200.
- 2. Perform prime factorization of the chosen numbers.
- 3. Use the prime factors to find the HCF and LCM of the numbers.
- 4. Present your factor trees and results in a creative chart or poster.

Reflection Question:

Why does the product of HCF and LCM of two numbers equal the product of those numbers? Explain with your example.

Chapter 2: Polynomials

Topic: Graphical Representation of Zeros of Polynomials

Activity Title: Desmos Graphing Exploration

Instructions:

- 1. Use Desmos Graphing Calculator (online or mobile app) to explore the relationship between polynomials and their zeros.
- 2. Graph the following polynomials one by one:

a)
$$p(x) = x^2 - 9$$

b)
$$p(x) = x^2 + 2x - 8$$

c)
$$p(x) = x^2 - 6x + 9$$

d)
$$p(x) = x^2 + 4$$

e)
$$p(x) = x^2 - x - 12$$

- 8. 3. For each graph:
- Identify the zeros (x-intercepts).
- Observe the shape and direction of the parabola.
- Check if the polynomial has no real zeros, one real zero, or two real zeros.

Reflection Ouestion:

What patterns do you observe in the graphs related to the number of real zeros? How can the discriminant help predict these patterns?

HISTORY

Q. 2. Find out about the local government in the village or town you live in.

If you live in a village, find out the names of the following:

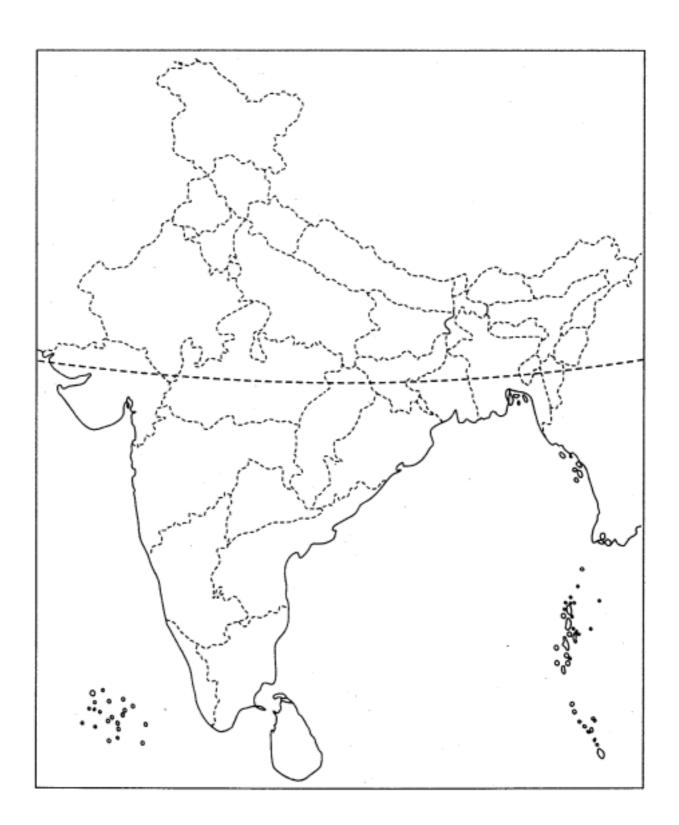
Your panch or ward member, your sarpanch, your panchayat samiti, the chairperson of your zilla parishad. Also find out when did the last meeting of the gram sabha take place and how many people took part in that.

If you live in urban areas, find out the name of your municipal councillor, and the municipal chairperson or mayor.

Also find out about the budget of your municipal corporation, municipality and the major items on which money was spent.

GEOGRAPHY

- 1. Question 1. Locate and label the following items on the given map with appropriate symbols.
 - 1. Sundarbans National Park [CBSE 2011, 10]
 - 2. Corbett National Park [CBSE 2016, 12, 10]
 - 3. Sarika Wildlife Sanctuary [CBSE 2012]
 - **4.** Reserved forest [CBSE 2012, 11]
 - 5. Unclassed forest [CBSE 2012, 11]
 - **6.** Protected forest [CBSE 2016]



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