CAMBRIAN PUBLIC SCHOOL
Kanke Road, Ranchi

Holiday Assignment (Session 2026-27)

Wishing you all a very Happy Diwali and Chhath Puja!

May these auspicious festivals bring happiness, peace, prosperity, and good health to you and your family

Class: IX

General Instructions:

- Complete all the questions neatly as instructed.
- Maintain proper handwriting and presentation.
- Revise the syllabus covered before attempting the assignment.
- Submit the Completed assignment on the first day after the Vacation.
- Parents are requested to guide and encourage their ward to complete the work independently.

ENGLISH LANGUAGE & LITERATURE

1• CREATIVE WRITING

MAGAZINE ARTICLE — Small Actions, Big Changes

Write an article for your school magazine on the topic "Small Actions, Big Changes: How Students Can Make a Difference". You may discuss saving water, reducing plastic, helping others, reading, or using technology responsibly. Give your article a catchy title and include examples and a clear concluding message. Write in 120–150 words.

2 • SHORT PROJECT

PROJECT: CARRIER OF GOODS — A JOURNEY THROUGH WORK, DIGNITY AND TRANSPORT

Based on the chapter "Carrier of Goods" from your Kaveri English textbook, prepare a short, illustrated project that shows your understanding of the text and its connection with everyday life. Use the chapter as your primary source and write in your own words.

YOUR PROJECT SHOULD INCLUDE:

1. Cover page: Project title, your name, class, section and roll number.
2. Chapter snapshot: Write a brief summary of the chapter in 80–100 words.
3. Key ideas: Identify three important ideas or messages from the chapter and explain each briefly.
4. People and livelihoods: Explain how carriers of goods contribute to daily life and why their work deserves respect.
5. From source to destination: Draw a simple flowchart showing how a product reaches a customer, naming the people and transport involved.

HINDI

परियोजना कार्य: 'दो बैलों की कथा' — मित्रता, स्वतंत्रता और संवेदना

प्रश्न: मुंशी प्रेमचंद की कहानी 'दो बैलों की कथा' के आधार पर एक आकर्षक चित्रात्मक एवं रचनात्मक परियोजना तैयार कीजिए, जिसमें हीरा और मोती की मित्रता, पशुओं के प्रति प्रेम, स्वतंत्रता का महत्त्व तथा अन्याय के विरुद्ध संघर्ष को दर्शाइए। साथ ही, आज के समाज में पशु-पक्षियों के प्रति संवेदनशीलता बढ़ाने के उपाय और पशु-संरक्षण में आधुनिक तकनीक एवं AI के उपयोग को भी रोचक चित्रों, नारों तथा उदाहरणों के माध्यम से प्रस्तुत कीजिए।

(नोट - चार्ट पेपर में बनाए)

SANSKRIT

रचनात्मककार्यम्

1. कस्याञ्चित् **घटनायाः** अथवा **कथायाः** वर्णनं मित्रेण सह संवादमाध्यमेन संस्कृतभाषायां लिखत।
2. **उद्यानस्य** चित्रं निर्माय तस्मिन् संस्कृतभाषायां पञ्च वाक्यानि लिखत।

निर्देशः — निर्धारितं विषयं A4 आकारस्य पत्रे अथवा स्क्रैपबुक-पुस्तिकायां लिखत।

* संस्कृतभाषायाः शुद्धप्रयोगं कुरुत।
* कार्यस्य आकर्षकत्वाय मनोहरवर्णानां चित्राणां च प्रयोगं कुरुत।

MATHEMATICS

1. For the following experiments, write down all the sample space S.
   a) Rolling a die and tossing a coin together.
   b) Choosing a random integer between -5 and +5.
2. What is the probability of:
   a) getting an even number when rolling a fair 6-sided dice?
   b) getting the sum of two numbers shown is 8, when two die are rolled together?
3. A bag contains 3 red balls, 2 blue balls, and 1 green ball. One picked is picked at random. What is the probability that it is not red?
4. Find the nth term and the sum of the first 20 terms of the AP: 5,9,13,17….
   a) Find the 12^{th} term of a GP with common ratio 2, whose 8^{th} term is 192.
   b) The sum of the first three terms of a GP is and their product is -1. Find the common ratio and the terms.

PHYSICS

Physics Assignment: Measuring Building Heights Using Kinematics

Objective:

To apply the kinematic equations of motion to determine the height of five different tall buildings by measuring the time it takes for an object to drop from the top to the ground.

CHEMISTRY

Theme: "Chemistry Behind the Festival of Lights"

Dear Students,

This vacation assignment connects Chemistry with everyday life and encourages scientific thinking while helping you revise concepts already taught in class. Complete the activities neatly and independently. Keep your work brief and meaningful.

Activity 1: The Science of a Diya

Observe a traditional oil lamp and answer the following questions in 2–3 sentences each.

Identify the physical states of the oil, wick and air involved in the burning of a diya.

Is the melting of candle wax a physical change or a chemical change? Give a reason.

Why does a flame need a continuous supply of air?

Activity 2: Chemistry in My Kitchen

Choose any two substances used at home during Diwali, such as salt, sugar, baking soda or turmeric. Write the common name, chemical name (where applicable) and one use of each substance.

Activity 3: A Little Scientific Thinking

A student mixes sugar with water, while another mixes sand with water. Answer the following:

Which mixture is homogeneous and which is heterogeneous?

How would you separate the sand from the water?

General Instructions

Complete the assignment in your own words in your Chemistry notebook.

Use diagrams or illustrations only where they add value.

Revise the Chemistry concepts already taught in class.

Do not conduct experiments involving fire, chemicals or crackers at home.

Use recycled paper and simple materials wherever possible.

BIOLOGY

1. **Asexual Reproduction in Amoeba**
   Draw a labelled diagram illustrating binary fission in Amoeba. Imagine that the nucleus divides normally, but the cytoplasm fails to divide. Predict the possible consequences for the daughter cells and justify your answer scientifically.
2. **Reproduction in Flowering Plants**
   Draw a labelled longitudinal section of a bisexual flower. Trace the possible pathway of a pollen grain from

the anther to the ovule, and predict the consequences for seed formation if the pollen tube fails to reach the embryo sac.

3. **Human Female Reproductive System**

Draw a neat, labelled diagram of the human female reproductive system. Imagine that the oviduct becomes blocked on both sides. Analyse how this condition could affect fertilisation and natural pregnancy, and suggest a scientifically appropriate solution.

HISTORY

1. On an outline map of India, mark and label:

Mewar, Gwalior, Malwa, Awadh, Etawah

GEOGRAPHY

On an outline map of world, locate and label the following ocean currents. Mention whether the currents are warm or cold.

Gulf stream, labrador Peru, Falkland, Auglhas, California and Kuroshio.

POLITICAL SCIENCE

Design a public policy for students of your age. On an A4 sheet, make a poster.

Must include:

- Name of your policy:

E.g. "**Free Sports Hour Policy**"

- Why is this policy needed? (Problem)
- What will government do? (Solution)
- How will it help students?
- Draw logo and slogan

ECONOMICS

Prepare a PPT on **From Ideas to startups.**

INFORMATION TECHNOLOGY

UNIT-3: ELECTRONIC SPREADSHEET — LIBREOFFICE CALC

Write steps and draw as mentioned in A4 size Paper.

Objective: To enter data, apply grid/cell formatting, and use the AutoFill handle for sequence generation.

Steps:

Open **LibreOffice Calc** to display a blank worksheet grid.

Enter column headings in Row 1: S.No., Month, Item Name, Quantity, Price, Total Amount.

AutoFill Usage: Type 1 in cell A2 and 2 in A3. Select both cells, drag the small square handle (AutoFill handle) at the bottom-right corner downwards to generate numbers 1 to 10 automatically.

Type January in cell B2 and drag the AutoFill handle down to auto-populate months.

Select table header A1:F1, apply **Bold**, set **Background Color** to light blue, and choose **Center Alignment**.

Select all table cells (A1:F11), go to **Format > Cells > Borders**, and select **Set Outer Border and All Inner Lines**.

Basic Formulae and Built-in Mathematical Functions

Objective: To perform calculations using arithmetic operators and standard functions (SUM, AVERAGE, MAX, MIN, COUNT).

Steps:

Enter numerical data for 5 subjects across columns B to F for multiple students.

Total Marks (SUM): In cell G2, type =SUM(B2:F2) and press Enter.

Average Marks (AVERAGE): In cell H2, type =AVERAGE(B2:F2) and press Enter.

Copy formulas down for other students using the AutoFill handle.

Maximum Marks (MAX): Below the student data, type =MAX(G2:G10) to find the highest score.

Minimum Marks (MIN): Type =MIN(G2:G10) to find the lowest score.

Count Students (COUNT): Type =COUNT(G2:G10) to get the total number of student entries.

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