



**KALKA PUBLIC SCHOOL**

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# KALKA PUBLIC SCHOOL

## ALAKNANDA



**CLASS IX (2026- 2027)**

### *Summer Holiday Homework - A Journey of Learning and Fun*

Dear Students,

As the summer holidays approach, I know many of you are looking forward to a well-deserved break. Summer is a time for relaxation, exploration, and making memories with family and friends. It's also a great opportunity to keep your minds active and engaged in fun and meaningful ways.

- \*Balance Work and Play\***
- \*Explore Your Interests\***
- \*Connect with family and friends\***
- \*Be Creative\***

Remember, the goal of summer homework is to keep you engaged and prepare for the upcoming school year. Have fun with it and enjoy your summer break. I look forward to hearing about your adventures and seeing the amazing work you create when we return to school.



*Wishing you a fantastic summer vacation filled with joy, learning, and new experiences!*

Dr. Anju Mehrotra

Director Principal

**Happy Holidays!!**



## **GENERAL INSTRUCTIONS**

- Holiday Homework must be done in a very neat and presentable manner.
- Homework will be assessed on the basis of neatness, handwriting, creativity, presentation and completion of all the questions & indexing of work. It will be part of internal assessment.
- Avoid cutting and overwriting.
- Creativity and Originality of work will be appreciated.
- Homework for each subject comprises four parts-(A) Subjective that includes subject specific assignment, (B) Multidisciplinary Project with Art Integration, (C) Project for Kaushal Bodh (D) "My Facebook".
- Read the instructions carefully under each Part and submit it accordingly.

### **SUBMISSION OF HOLIDAY HOMEWORK:**

**The last date of submission of the Homework is 7<sup>th</sup> July, 2026. Do all Parts/ Project work, as directed.**



**PART A- SUBJECTIVE**

This part consists of subject specific assignment that needs to be done in subject notebook or as specified in the instructions.

**SUBJECT: ENGLISH (101)**

[https://drive.google.com/file/d/1uV6O6GuyZ4edqmNm7CV3FERQpgAa\\_Aq9/view?usp=sharing](https://drive.google.com/file/d/1uV6O6GuyZ4edqmNm7CV3FERQpgAa_Aq9/view?usp=sharing)

**SUBJECT: HINDI**

<https://drive.google.com/file/d/1RA3MVJqc6Dt0Ddlj0p9QTMFvTqZUul7n/view?usp=sharing>

<https://drive.google.com/file/d/1Fy95z68licPaV5zQ9erBrc944VcU4BTh/view?usp=sharing>

**SUBJECT: MATHEMATICS (041)**

[https://drive.google.com/file/d/1d0LKg6c00hxrVsYzeXJRwX1l-qX\\_KaRC/view?usp=sharing](https://drive.google.com/file/d/1d0LKg6c00hxrVsYzeXJRwX1l-qX_KaRC/view?usp=sharing)

**SUBJECT: SCIENCE (086)**

[https://drive.google.com/file/d/1LjgyU1WstBeYhuaHL-wZ0o\\_lLoQDaRK0/view?usp=sharing](https://drive.google.com/file/d/1LjgyU1WstBeYhuaHL-wZ0o_lLoQDaRK0/view?usp=sharing)

**SUBJECT: SOCIAL SCIENCE (087)**

[https://drive.google.com/file/d/12\\_972wSFJ801iWigBERo8-bSwSWNEkYc/view?usp=sharing](https://drive.google.com/file/d/12_972wSFJ801iWigBERo8-bSwSWNEkYc/view?usp=sharing)

**SUBJECT: SANSKRIT**

<https://drive.google.com/file/d/1S5NZPwdsIczGb53KcFlmdzsIOkY-W2LL/view?usp=sharing>

**SUBJECT: ARTIFICIAL INTELLIGENCE**

[https://drive.google.com/file/d/19Pkzr0PMF6Okh3FpTHSbyU39fdj\\_YiYE/view?usp=sharing](https://drive.google.com/file/d/19Pkzr0PMF6Okh3FpTHSbyU39fdj_YiYE/view?usp=sharing)



**SUBJECT: FINANCIAL MARKETS**

<https://drive.google.com/file/d/1eHjzpU0FMQtewgz5ruMGGGJHggtZLR9g/view?usp=sharing>

**SUBJECT: HEALTHCARE (413)**

[https://drive.google.com/file/d/1RMLYhgHzTtfnevzFvz4BHR5jdMvE\\_PUh/view?usp=sharing](https://drive.google.com/file/d/1RMLYhgHzTtfnevzFvz4BHR5jdMvE_PUh/view?usp=sharing)

**PART B- ART INTEGRATED**

**INSTRUCTIONS:**

For ART INTEGRATED PROJECT- The entire project for all subjects, has to be compiled in one Project file in the following sequence of subjects and is to be done on A4 size sheets with specific colours:

- English- Peach
- Hindi/ Sanskrit- Green
- Mathematics- White
- Science- Yellow
- Social Science- Pink
- AI/ FM/ HC- Blue

The cover of the project file must comprise of:

- a) School's name: Kalka Public School, Alaknanda
- b) CBSE Art Integrated Project
- c) Name of the student
- d) Class/ Section
- e) Session: 2026- 27

The first page of the Project file - Index

The Second page - Acknowledgment

The Third page –Certificate followed by the main content pages of the Project.

**SUBJECT: ENGLISH (101)**

**Topic: Sikkim – A Model of Sustainable Living**

**Task:**

Design a creative poster on “Sikkim – A Model of Sustainable Living” highlighting how Sikkim promotes organic farming, clean environment, biodiversity, and eco-friendly living.



**Instructions:**

Use a catchy title, 2–3 slogans, suitable illustrations, and a short message in English.

**SUBJECT: HINDI**

**परियोजना कार्य**

**विषय: सिक्किम की संस्कृति एवं पर्यटन**

**1** संस्कृति (Culture)

निम्नलिखित विषयों पर जानकारी एकत्र करें—

पारंपरिक वेशभूषा: पारंपरिक वेशभूषा का चित्र बनाइए।

लोक नृत्य एवं भोजन संस्कृति: लोक नृत्य अथवा प्रसिद्ध भोजन का स्केच बनाइए।

**2** पर्यटन (Tourism)

निम्नलिखित पर्यटन स्थलों का संक्षिप्त वर्णन करें—

Gangtok

Tsomgo Lake

Nathula Pass

Yumthang Valley

- ◆ पर्यटन का स्थानीय जीवन पर प्रभाव

रोजगार के अवसर

होटल एवं व्यापार का विकास

स्थानीय संस्कृति को पहचान

पर्यावरण संरक्षण की आवश्यकता

**परियोजना निर्देश**

- ✓ परियोजना हस्तलिखित हो।
- ✓ चित्र एवं रंगों का प्रयोग करें।
- ✓ साफ-सुथरी प्रस्तुति रखें।
- ✓ आवश्यकतानुसार मानचित्र/पोस्टर जोड़ सकते हैं।

(इस सारे कार्य के लिए एक फाइल तैयार कीजिए, कवर पेज में अपना नाम, कक्षा विभाग, अध्यापिका का नाम भी लिखें।)



**SUBJECT: MATHEMATICS (041)**

Do any one of the four given topics.

**1. Statistical Analysis of Sikkim's Demographics**

The Math: Collect data on Sikkim's population by district (East, West, North, South) or its literacy rate over the last few decades.

The Art: - Represent this data using colorful Bar Graphs or Histograms. Instead of plain bars, use traditional Sikkimese motifs like the \*Prayer Wheel\* or Bamboo shoots to form the bars.

\*Key Comparison: Compare the forest cover of Sikkim (nearly 47%) with your home state using a Pie Chart

**2. Geometry in Buddhist Architecture (Monasteries)**

Sikkim is home to stunning monasteries like Rumtek and Enchey, which are goldmines for geometric study.

\*The Math: Identify geometric shapes used in the architecture. Look for Congruent Triangles in roof structures, Symmetry in the "Infinite Knot" (one of the 8 auspicious symbols), and Circles/Squares in the Mandalas.

The Art: Draw a floor plan or a front elevation of a monastery. Use your compass and ruler to ensure perfect symmetry, then color it using the traditional red, gold, and blue palette.

**3. Mensuration: The Traditional 'Bakhu' (Costume)**

The Bakhu is the traditional dress of the Bhutia community.

\*The Math: Calculate the Surface Area of the fabric required to stitch a Bakhu. If the dress involves a cylindrical sleeve or a rectangular wrap, calculate the area of these individual components.

\*The Art:\* Create a paper model of a Bakhu or a traditional Sikkimese hat. Use different textures of paper to represent the silk and brocade. Label the dimensions (length, breadth, radius) directly on your artistic model.

**4. Coordinate Geometry: Mapping the Silk Route**

Sikkim was a crucial part of the ancient Silk Route via the Nathu La Pass.

The Math: Create a Cartesian Plane over a map of Sikkim. Assign coordinates (x, y) to major landmarks like Gangtok, Pelling, and Lake Tsomgo.

The Art: Use "Thread Art" (string art) to connect these coordinates on a wooden board or chart paper. This visualizes the distance and the mountainous terrain through mathematical lines.

Suggested Project Layout (For your File)

Organize your project file like this:

1. \*Cover Page: Title (e.g., \*Sikkim: A Mathematical Journey\*), your name, roll number, and images of the Khangchendzonga.
2. \*Objectives:\*Why are you doing this?



3. Introduction to Sikkim: A brief paragraph about the "Organic State of India."
4. The Mathematical Content: \* (Insert your chosen topic from above with calculations and graphs).
5. Conclusion: What you learned about the relationship between Math and Culture.
6. Bibliography

\*Pro-tip:\* Use a bit of \*Mandala art\* on the borders of your math pages to keep the "Art Integration" theme consistent throughout!

### **SUBJECT: SCIENCE (086)**

**Theme: Exploring the State of SIKKIM**

#### **TOPIC: SUSTAINABLE DEVELOPMENT AND GREEN INNOVATIONS IN SIKKIM**

Sikkim achieves its Sustainable Development Goals (SDGs) by integrating strict environmental conservation, poverty alleviation, and climate action into state policies. It is India's first 100% organic state and a carbon-negative leader, prioritizing food security, guaranteed employment, and sustainable ecotourism to align with global development targets.

#### **A. Create a project file on "SUSTAINABLE DEVELOPMENT AND GREEN INNOVATIONS IN SIKKIM"**

The project- file must include:

1. Cover Page
2. Index
3. Introduction to SDGs adopted by Sikkim
4. Data Collection / Survey / Case Study
5. Innovative Solutions/ Green solutions adopted by Sikkim to reach the SDGs
8. Diagrams / Pictures / Newspaper Articles
9. Conclusion
10. Bibliography

#### **B. Create a poster/ model on "Sustainable Development and Green Innovations in Sikkim"**

The poster/ model must include all the measures adopted by Sikkim to become a 100% organic state thus by meeting the SDGs.

### **SUBJECT: SOCIAL SCIENCE (087)**

**Theme: Exploring the State of Sikkim**





Choose ANY ONE of the following:

**Option 1: Poster Making -**

Create a neat and colourful poster on the topic:

**“Sikkim – A Beautiful Himalayan State”**

Include:

- One map showing location of Sikkim
- 2–3 key features (culture, nature, or tourism)
- Pictures or drawings
- A short slogan

**Option 2: Picture Collage**

Make a collage on:

**“Life in Sikkim”**

Include pictures related to:

- Culture and festivals
- Food
- Natural beauty (mountains, rivers, etc.)

**SUBJECT: SANSKRIT**

निर्देश - \* सभी कार्य सुंदर व स्व हस्त लिखित होना चाहिए।

\*परियोजना कार्य के कवर पेज में अपना नाम, कक्षा, वर्ग, अनुक्रमांक तथा अध्यापक का नाम भी लिखें।

\* कार्य करने के लिए a4 साइज शीट का प्रयोग कर सकते हैं।

(संस्कृत परियोजना कार्य)

" दिल्ली और सिक्किम- विविधता में एकता "

भारत की अद्भुत संस्कृति और विरासत विभिन्न राज्यों के माध्यम से प्रस्तुत होती है इस प्रोजेक्ट में हम दिल्ली और सिक्किम का परिचय कला, संस्कृति, वास्तुकला की तुलना करेंगे , जिससे हम इनके बीच संबंध और विविधता को समझ सकें ।

1. दिल्ली और सिक्किम का परिचय \*

\* दिल्ली \* ऐतिहासिक और आधुनिकता का संगम, भारत की राजधानी । \*सिक्किम\* प्राकृतिक सौंदर्य बौद्ध संस्कृति और जैव विविधता से समृद्ध राज्य ।



2. कला और वास्तुकला - दिल्ली मुगल ब्रिटिश और आधुनिक भारतीय वास्तुकला (लाल किला, कुतुब मीनार, इंडिया गेट)।

\*सिक्किम\* - बौद्ध मठों की स्थापत्य कला (रूमटेक मठ, पेमा यांगत्से मठ)।

**SUBJECT: ARTIFICIAL INTELLIGENCE**

**Activity: AI Vocabulary Book**

**Objective of the Activity**

This activity will help students:

- Learn important AI-related terms.
- Improve understanding of basic AI concepts.
- Develop creativity and presentation skills.
- Build a personal AI reference booklet.

**Instructions for Students**

You have to prepare a small illustrated dictionary containing important Artificial Intelligence terms and their meanings.

Students submit the work in **printed spiral A4 file**

**Terms to Include (Compulsory)**

You must include the following terms:

- Artificial Intelligence
- Machine Learning
- Deep Learning
- Neural Network
- Data Science
- NLP
- Algorithm
- Automation
- Bias
- Chatbot
- Robotics
- Computer Vision

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**Detailed Instructions for Each Page**

Each vocabulary page must contain:

**1. Title of the Term**

Write the term in bold and colorful letters.

Example:

**Artificial Intelligence (AI)**

**2. Meaning/Definition**

Write the definition in simple student-friendly language.



Example:

**Artificial Intelligence (AI)**

AI is a technology that enables machines and computers to think, learn, and make decisions like humans.

**3. Real-Life Example**

Write one example related to daily life.

Example:

- Face Unlock in smartphones
- Voice assistants like Siri or Alexa

**4. Small Diagram/Icon**

Draw or paste a related picture.

Examples:

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**5. Fun Fact (Optional but Recommended)**

Add one interesting fact.

Example:

“Netflix uses AI to recommend movies.”

- **Suggested Format of One Page**

**Artificial Intelligence (AI)**

**Definition:**

Artificial Intelligence is the ability of machines to perform tasks that normally require human intelligence.

**Example:**

Voice assistants like Alexa and Google Assistant use AI.

**Diagram:**

(Draw a robot or computer brain)

**Fun Fact:**

AI is used in self-driving cars.

**Page Requirement**

<b>Requirement</b>	<b>Details</b>
Minimum Terms	8
Suggested Pages	10–15
Handmade/Printed	Either allowed
Diagrams	Compulsory
Coloring	Recommended

**Cover Page Instructions**

The first page should contain:

**Title:**

**“My AI Vocabulary Book”**

Include:

- Student Name
- Class & Section
- Roll Number
- Subject Name
- School Name



Decorate with AI-related drawings.

**Back Page Activity (Optional)**

**“AI Word Search” or “AI Quiz”**

Students can create:

- Crossword puzzle
- Matching activity
- Word search
- using AI words.

**SUBJECT: FINANCIAL MARKETS**

**Topic: Evolution of Money**

1. Front page (Name, class, section, roll no., topic name, session, mentor)
2. Acknowledgement

I, \_\_\_\_\_, do hereby declare that this project is my original work and I would like to extend my sincere and heartfelt thanks towards all those who have helped me in making this project. Without their active guidance, help, cooperation and encouragement, I would not have been able to present the project on time.

I extend my sincere gratitude to my Director Principal Dr. Anju Mehrotra and my ‘Introduction To Financial Market’ teacher Mrs. Bhoomika Sahni for their moral support and guidance during the tenure of my project.

I also acknowledge with a deep sense of reverence, my gratitude towards my parents and other faculty members of the school for their valuable suggestions given to me in completing my project.

I would also like to thank CBSE for giving us an opportunity to widen our knowledge base by introducing this topic of study and my school for giving us this subject option.

DATE

SIGNATURE OF INTERNAL EXAMINER

SIGNATURE OF EXTERNAL EXAMINER

**1. CERTIFICATE**

THIS IS TO CERTIFY THAT \_\_\_\_\_, A STUDENT OF CLASS IX HAS SUCCESSFULLY COMPLETED THE RESEARCH ON THE PROJECT, UNDER THE GUIDANCE OF MRS. \_\_\_\_\_ DURING THE YEAR 2026-27 IN FULFILLMENT OF ‘Introduction To Financial Market’ PRACTICAL EXAMINATION CONDUCTED BY AISSE, NEW DELHI.

DATE

SIGNATURE OF STUDENT

1. Index
2. Main Content (10-12 page)
3. Conclusion
4. Report (My Experience)
5. Bibliography



## 6. Teacher's Remarks

**SUBJECT: HEALTHCARE (413)**

1. Healthcare is an important part of sustainable development. Good medical facilities help improve people's health and quality of life. In a hilly state like Sikkim, both clinics and hospitals play a major role in serving people living in towns and remote villages. Compare and contrast a Clinic and Hospital of a hilly area like Sikkim and enlist the services provided by them. Based on this, identify the advantages of a clinic over hospital and the advantages of a hospital over clinic and prepare a report. The project must be made on A4 size sheets. The project- file must include:

- i. Cover Page
- ii. Index
- iii. Healthcare facilities in Sikkim
- iv. Common features and services offered by clinic in Sikkim
- v. Common features and services offered by hospital in Sikkim
- vi. Data Collection / Survey / Case Study
- vii. Diagrams / Pictures / Newspaper Articles
- viii. Comparison table of a clinic and a hospital
- ix. Advantages of Hospital over a Clinic
- x. Advantages of Clinic over a hospital
- xi. Conclusion
- xii. Bibliography

2. Create a Nutrition Chart/ Poster/ Model on the topic: **“Healthy Food for Healthy Teenagers – Inspired by Organic Sikkim”**

Teenagers need a balanced diet for proper growth, energy, and immunity. Sikkim is famous for organic farming and healthy food habits. Organic vegetables and grains grown in Sikkim provide nutritious and chemical-free food. The Chart/ Poster/ Model must connect nutrition science with Sikkim's organic lifestyle.

**OR**

Create a Chart/ Poster/ Model on the topic: **“Peaceful Mind, Healthy Life – Learning from Sikkim”**

Stress affects both mental and physical health. Students often experience stress due to studies, exams, and busy schedules. The peaceful environment and Buddhist culture of Sikkim promote calmness, meditation, and healthy living. The Chart/ Poster/ Model must explain stress-management techniques inspired by the peaceful lifestyle of Sikkim.

**PART C- KAUSHAL BODH**

**(Mandatory)**

**Theme: Science for Sustainable Living**

**Activity 1: Waste to Wisdom – Flashcards that Teach and Transform (SDG- 13: Climate Action)**

**Materials Required:** Old notebooks or used paper, Cardboard boxes or packaging material, Newspapers or old cards, Sketch pens/pencils, Scissors and glue

Waste to Wisdom Flashcards to be created using recycled materials for environmental learning.

**Step-by-Step Instructions:**

- i. Choose an Environmental Topic from the following: Food Chain, Pollution or you can decide your topic related to environmental issues.
- ii. Create “Waste to Wisdom” Flashcards
- iii. Each student uses only recycled material to create flashcards.
- iv. Each flashcard should include:
  - a) A key term or concept
  - b) A short definition
  - c) A simple diagram or example
  - d) (Optional) SDG icon and its meaning

Note: Students must ensure their flashcards are neat, clear and easy to understand.

**Activity 2: Mix, Toss and Taste (SDG- 2: Zero Hunger)**

**Materials Required:** Notebook sheets or survey forms, Pens/pencils, Chart paper or notebook for graphs, Boiled chickpeas or black gram, Chopped vegetables (onion, tomato, cucumber, etc.), Salt, lemon, basic spices, Bowls and spoons for mixing.

**Step-by-Step Instructions:**

- Understand Food & Health Patterns
  - i. Food habits affect energy, immunity and overall health
  - ii. Different families and students follow different eating patterns
  - iii. Surveys help us understand real-life habits and make informed choices
  - iv. Students understand what “healthy eating” means to them.
  
- Conduct a Classroom Survey
  - i. Form groups of 4–5.
  - ii. Each group prepares a 10-question survey, including:
    - a. Number of children in the family
    - b. Common illnesses among children
    - c. Daily meals and eating habits
    - d. Intake of fruits, vegetables and milk
  - e. Students interview their classmates and record responses carefully.
  
- Compile and Present Data
  - i. Each group organise their findings.
  - ii. Students can present using:
    - a. Simple charts
    - b. Bar graphs
    - c. Percentages (optional)
  - iii. Students identify patterns such as:
    - a. How many students eat fruits daily
    - b. Common healthy concerns
    - c. Healthy vs unhealthy habits
    - d. Common health concerns
    - e. Healthy vs unhealthy habits



- Prepare “Mix, Toss & Taste” Power Bowl  
Now, each student prepares a simple, healthy snack: Add boiled chickpeas or black gram to a bowl, add chopped vegetables, add salt, lemon and light spices and mix it well

This creates a protein-rich, fresh and nutritious power bowl.

**Discuss:** Which option is more sustainable?

- How fresh food helps both health and the environment?
- Share and Reflect  
Each student presents: One key finding from their survey  
One healthy habit student should follow

**Note:** Take photographs at each step and paste printouts in a project file. **Take a photo of your power bowl. The entire KAUSHAL BODH project needs to be made in a scrap book including all the steps, pictures and stating the importance of health and environment.**

## **PART D- MY FACEBOOK**

### **CREATIVE EXPERIENTIAL CORNER**

#### **Experiential Creative English**

**Task: Create Your Own Facebook Page**

Students will create a Facebook-style page to express their daily thoughts, emotions, memories, and experiences in English.

#### **What to Post:**

**Write 10 creative posts during the vacation on topics like:**

- Today I feel...
- A moment that made me smile
- A memory I will never forget
- Something I learnt today
- My mood in one sentence
- A person who inspires me
- A place that gives me peace
- One thing I am grateful for
- A dream I wish to achieve
- My message to the world

#### **Instructions:**

- Use simple, expressive English.
- Add pictures, captions, quotes, hashtags, or emojis.
- Keep the content original.
- Maintain a neat and creative presentation.

#### **Submission:**

Submit screenshots/printouts or a scrapbook/ PPT designed like a Facebook page.

#### **Learning Outcome:**

This activity will help students improve expression, vocabulary, creativity, and confidence in using English in real-life situations.