

# MAHESHWARI PUBLIC SCHOOL, VAISHALI NAGAR, AJMER

## SUMMER VACATION ASSIGNMENT

Class IX

ENGLISH

**Theme: Exploring the Cultural Mosaic of Nagaland**

Instructions:

Students are to make the following, integrating English language skills with artistic elements to present their understanding of Nagaland's culture.

1. Poetic Expression: Compose a poem (minimum 12 lines) inspired by Nagaland's festivals, traditions, or landscapes.
2. Creative Storytelling: Write a short story (150–200 words) set in Nagaland, incorporating elements of its culture, folklore, or daily life. (Include relevant drawings or visuals to enhance the narrative.)

Submission Guidelines:

1. Format: Neatly handwritten on A4-sized sheets.
2. Visuals: Use drawings, paintings, or printed images to support your work.

## HINDI

**अंतःविषयक परियोजना कार्य-**

राजस्थान से नागालैंड घूमने गए किसी व्यक्ति का साक्षात्कार लीजिए जिसमें नागालैंड और राजस्थान की सभ्यता और संस्कृति का तुलनात्मक विवरण हो। प्राप्त जानकारी की सचित्र प्रस्तुति कीजिए।

**मौखिक गतिविधि-**

पाठ्य पुस्तक से इतर रैदास के अन्य दो पदों को कंठस्थ कर कक्षा में सस्वर गायन कीजिए।

## MATHEMATICS

1. Represent  $\sqrt{10}$  on number line
2. Prove  $3 + 2\sqrt{3}$  is an irrational number, given that  $\sqrt{3}$  is irrational
3. Prove  $\sqrt{7}$  is an irrational number

### 4. Case Study Based Questions

To support helpless people and orphans is the collective responsibility of the whole society. To measure the spirit a survey was conducted in a city it was found that 7 out of every 13 households are donating some amount of their income to an orphanage or old age home or institutions for physically handicapped.

On the basis of this information, answer the following questions

- (a) Write the fraction of households, which are donating their income
- (b) Write the fraction of household which are not donating their income
- (c) Write the decimal form of the fraction of households which are donating their income

5. Prove that the points (0,0), (5, 5) and (– 5, 5) are the vertices of a right-angled isosceles triangle. Find the length of the hypotenuse and also find area of the triangle.

## SCIENCE

### SCIENCE PROJECT FOR PORTFOLIO “9 Days Challenge – My Journey to Heal the Earth”

#### INTRODUCTION

The environment is very important for all living beings, but today it is getting polluted due to human activities. To protect nature, we must start with small steps in our daily life.

The **9 Days Challenge** is an activity-based project where you have to perform one eco-friendly task each day for 9 days. These activities will help you to understand how simple habits can make a big difference in saving the Earth. \*Small Steps • Big Change\*

#### **9 DAYS ACTIVITIES** -\*“Small Steps Today, Better Tomorrow.”\*

**Day 1: Clean & Heal** : Clean your surroundings and separate dry and wet waste.

**Day 2: Walko & Cyclo**: Choose walking or cycling for short distances instead of using bikes or cars. Even replacing one daily trip with walking can make a noticeable difference over time.

**Day 3: Buzz & Chirp**: Place a small bowl of water or grains outside your home, especially during hot weather.

**Day 4: Ecological Corridor**: Planting a tree is great, but caring for it is even more important. Water it regularly, protect it from damage, and ensure it grows well.

**Day 5: Ocean 11**: Reduce single-use plastics like bags, bottles, and straws. Carry reusable alternatives. Plastic waste often ends up in oceans, harming marine life and polluting ecosystems.

**Day 6: Earthierian Rights**: Adopt simple eco-friendly habits such as saving electricity, conserving water, reusing items, and avoiding waste. These small daily actions collectively reduce your environmental footprint

**Day 7: Preserve Indigenous**: Learn and respect traditional ways of living that are naturally sustainable—like using natural materials, conserving resources, and living in balance with nature. These practices often have minimal environmental impact.

**Day 8: No Gadget Day**: Take a break from phones, TVs, and other devices. This reduces electricity use and gives your mind rest. Use the time to connect with people, nature, or yourself.

**Day 9: Food Secure World**: Avoid wasting food by taking only what you can eat and storing leftovers properly. Food waste also wastes water, energy, and labor used to produce it. You can share extra food with others instead of throwing it away

#### INSTRUCTIONS FOR PROJECT WORK

After completing all 9 days activities, students have to prepare a project based on their experience.

- \* Use plain A4 size sheets
- \* You may use colors, headings, and small drawings
- \* You can paste photos (optional) of activities performed
- \* Do NOT rewrite the introduction or activities again

Write the following sections in your own words:

**MY EXPERIENCE**: Write about your overall experience of doing the 9 days challenge.

Mention:

- \* How you felt while doing activities
- \* What you learned
- \* Any difficulty you faced

**ACTIVITIES I LIKED THE MOST**: Write about 2–3 activities that you enjoyed the most.

Also explain:

- \* Why you liked them
- \* How they helped the environment

**HABITS I WILL CONTINUE**: Write about the good habits you will continue in your daily life.

Example:

- \* Saving water, food
- \* Avoiding plastic
- \* Walking short distances

**CONCLUSION:** Write a short conclusion about what this project taught you.

Focus on: \* Importance of protecting environment \* How small steps make a big difference

**ART INTEGRATED SCIENCE PROJECT :** Scientific thinking in traditional art forms

Activity -Create \*any one painting\* based on:

\* Rajasthani Art or Naga Tribal Art or Any Traditional Art Form

Draw on an A4 size sheet. Use appropriate colors and patterns of the chosen art form

On a separate sheet write a brief note (5–6 points) explaining the scientific thinking involved in the traditional art form you have chosen.

What is “Scientific Thinking” in This Project?

Scientific thinking means using observation, knowledge of materials, and understanding of nature while creating art.

In traditional paintings, artists did not randomly create art—they:

Observed nature carefully (plants, animals, surroundings)

Selected suitable materials (natural colors that last long)

Used practical methods (mixing, preparing, and applying colors)

Understood environment and lifestyle

**GUIDELINES for Write-Up (Explain Briefly in Points)**

1. Natural Pigments (Chemistry) - Colors were made from plants, minerals, and soil.  
→ Shows knowledge of extracting and using substances.
2. Preparation of Colors- Artists mixed and processed materials to get desired shades.  
→ Basic understanding of material properties.
3. Eco-Friendly Approach- No synthetic chemicals were used.  
→ Environment-friendly and sustainable practice.
4. Observation of Nature- Artists closely studied animals, plants, and landscapes.  
→ Scientific observation skill.
5. Biodiversity Awareness- Paintings include variety of living organisms.  
→ Understanding of natural diversity.
6. Adaptation to Environment- Art reflects local lifestyle (royal / tribal / forest life).  
→ Link between humans and environment.

## Social Science

### Rajasthan and Nagaland

#### 1. Location and Geography

☑ Rajasthan: Located in North-West India; Largest state of India (by area); Dominated by the Thar Desert

Climate: Hot and dry; Low rainfall

☑ Nagaland: Located in North-East India; Mostly hilly and mountainous; Covered with forests

Climate: Moderate with high rainfall: Receives heavy monsoon rains

#### 2. Culture and Traditions

Rajasthan Culture: Known for royal heritage and traditions; Famous dances: Ghoomar, Kalbeliya. Colorful dresses (ghagra-choli, turbans); Famous festivals: Desert Festival, Teej, Gangaur  
Rich in folk music and handicrafts

Nagaland Culture: Tribal culture (16 major tribes); Famous dance: War dance; Traditional attire with feathers and beads; Famous festival: Hornbill Festival; Strong community bonding and traditions

### 3. Food Habits;

**Rajasthan:** Mostly vegetarian; Famous dishes: Dal Baati Churma, Gatte ki sabzi Uses less water due to desert conditions

**Nagaland:** Mostly non-vegetarian; Famous dishes: Smoked meat: Bamboo shoot dishes  
Uses local herbs and spices

### 4. Natural Disasters

**Rajasthan:** Main disaster: Drought; Causes: Low rainfall, Desert climate  
Effects: Water shortage; Crop failure

**Nagaland:** Main disasters: Floods, Landslides; Causes: Heavy rainfall: Hilly terrain  
Effects: Damage to roads and houses

### 5. Disaster Mitigation

**Rajasthan (Drought Management):** Rainwater harvesting systems; Building dams and reservoirs  
Use of drought-resistant crops; Government water conservation schemes

**Nagaland (Flood & Landslide Management):** Construction of strong drainage systems; Plantation of trees (prevents landslides); Early warning systems; Avoiding construction on steep slopes

### 6. Comparison Table

Feature; Rajasthan; Nagaland

Climate; Hot & dry; Wet & moderate; Geography; Desert; Hills & forests;

Culture; Royal & colorful; Tribal & traditional; Food: Mostly vegetarian; Mostly non-vegetarian

Disaster: Drought; Floods & landslides

Solution

Water conservation: Drainage & afforestation

Conclusion

Rajasthan and Nagaland are very different in terms of geography, culture, and disasters, yet both show how humans adapt to their environment. Rajasthan focuses on saving water, while Nagaland focuses on managing heavy rainfall and land stability. This comparison highlights the diversity and resilience of India.

**Add a map of India showing both states**

**Prepare a detail project on any 3 of the topics. Out of all the topics Disaster and Disaster Mitigation is compulsory**

**Prepare on A 4 size sheet . 2 sheets for each topic 1 for writeup and one for pictures**

## Artificial Intelligence

Design a poster on the topic "Welcome to Nagaland" using any software.

Instructions:

- Include Tourism places, Food and culture, dance forms or any other category to design the poster.
- Insert relevant images and content.
- Use various formatting effects available in software to enhance the presentation of the poster.

- Insert relevant Quotes and Text in the poster wherever necessary.

Mode of Submission:

Take a printout of the Poster and submit it when school will re-open after Summer Break.