

**DLF QEC INNOVATIVE SCHOOL  
RIDGE VALLEY  
DLF PHASE – IV, GURUGRAM, HARYANA**

RVS/CIR/031(C)/2023-24

22<sup>nd</sup> MAY 2023

**SUMMER BREAK ENRICHMENT WORK**

Dear Parent,

With summer holidays around the corner, our hearts swell up with a spectrum of emotions. To maintain educational continuum and to keep in view the rejuvenation you need, an enriching homework for the holidays has been designed to keep them constructively busy.

The students' work will be exhibited during **MERAKI** – an **Exhibition of Scholastic and Co-scholastic subjects**, in the month of July. The project work assigned to the students have been planned to unleash the hidden talents of students and provide them an enjoyable learning experience, we would appreciate if your child completes all tasks and submits the holiday homework on the stipulated date. It is mandatory for all students to complete **a minimum of three tasks** enlisted in the summer break homework, that has already been shared through the ERP.

We wish you and your family a happy bonding time during the vacation.

**The school will reopen after the summer break on Monday, 3<sup>rd</sup> July 2023.**

Warm Regards

Ms. Nidhi Tewari  
Principal

**DLF QEC INNOVATIVE SCHOOL**  
**RIDGE VALLEY, GURUGRAM**  
**SUMMER BREAK ENRICHMENT WORK**  
**ACADEMIC YEAR: 2023-24**  
**CLASS: X**

Summer vacation is a welcome break. Break from fixed schedules, rules, and regulations of the school... It is the time when students can relax and enjoy their free time. It is a time to catch up on rest. spend time with friends and family and explore new hobbies and interests. Freedom brings more responsibility, so keeping this in mind; we have planned most of the activities to keep them engaged and bring about a positive change in the society. The holiday homework has been designed to keep up the excitement and make the vacation memorable. It is based on the topics given in CBSE curriculum and students are expected to research, prepare the project reports and present their work in a creative manner. You may do the holiday homework of any three subjects of your choice.

**Please find below the rubrics of evaluation:**

- creativity and originality
- neatness and work presentation
- timely submission
- adherence to the guidelines given by the teacher.

Kindly help and guide your child in completing the work and exploring his/ her creative self. Submit the given homework in a folder with clearly mentioned name, class and section.

Happy Holidays!



## Holidays Homework



**Hurrah!**

**School is over, oh! What fun!**

Dear Students,

Holiday is the time that we all eagerly wait for. We all make plans to enjoy, to relax and to empower ourselves during these gala days.

This summer vacation, the Holiday Homework is designed keeping the following motto in mind-

**"Enjoy, Learn and Evolve"**

It is an attempt to channelize your creative energy. Doing it in the right spirit with enthusiasm will make it a great learning experience. Make sure that your work is neat, presentable, original and conforms to the assessment criteria specified subject wise.

Wishing you all a warm, positive and an engaging summer break!





## EXPLORE MANIPUR



You are the creative director for Manipur Tourism Board and have been invited to put up a stall at the India Tourism Expo at Pragati Maidan.

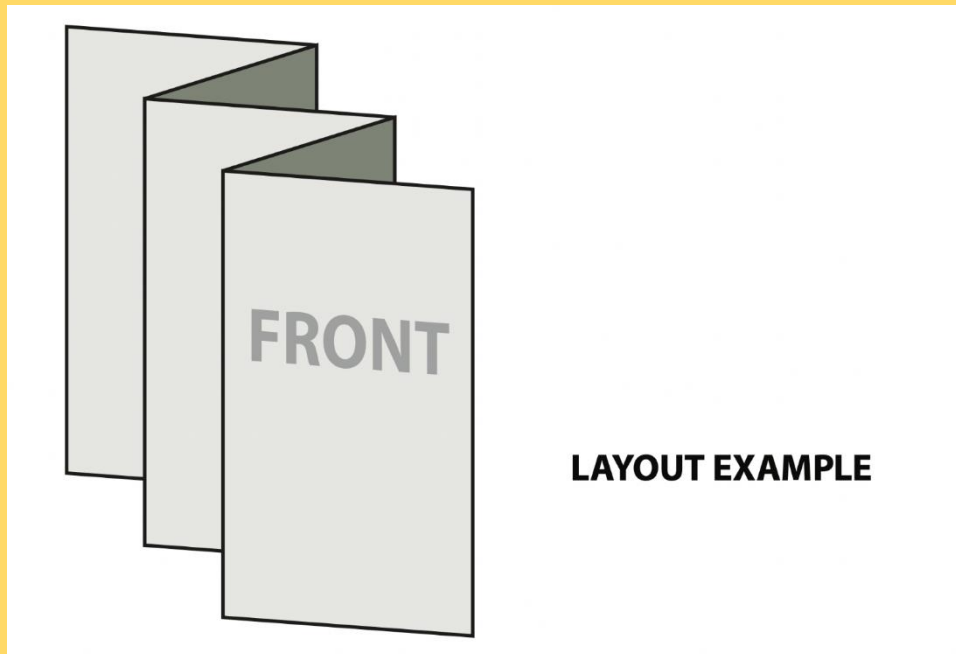
Design an **accordion fold brochure** highlighting the tourist attractions, scenic beauty, places of interest, hotels and places to stay to be distributed to attendees at the expo.

Your brochure can have the following:

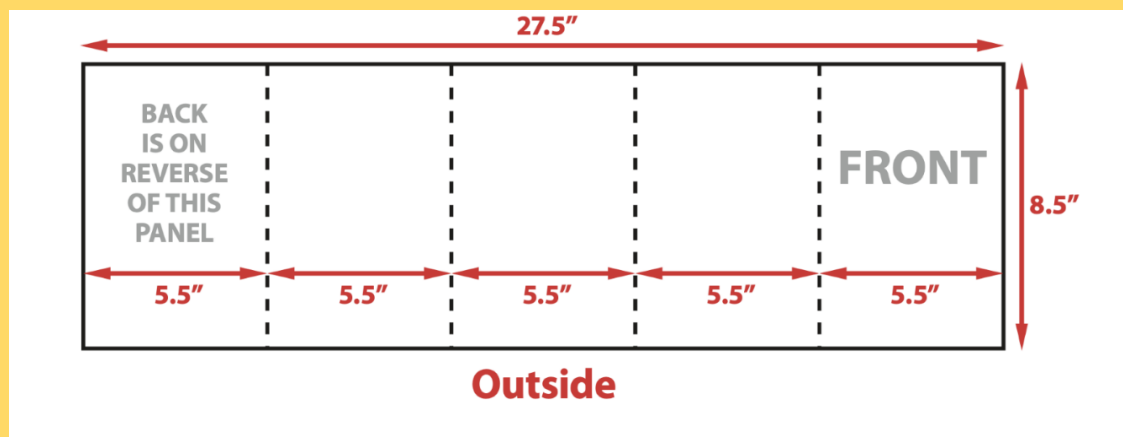
- Location
- Major Cities of Interest
- Weather/Climate
- Top Sightseeing
- Places of Religious Interest
- Hotels/Places to Stay
- Nearby Attractions/Day Trips

Use creative materials/pictures/catchy headlines to make your brochure visually appealing.

**Format for the project:**



**Suggested Size:**



\*\*\*\*\*

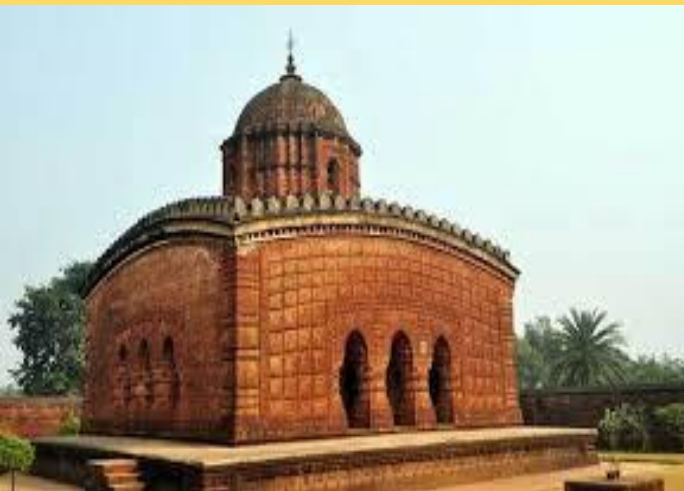
# HINDI

1. मणिपुर राज्य की किन्हीं 2 सांस्कृतिक धरोहरों के चित्रों का प्रयोग करते हुए उन पर हिंदी में संक्षिप्त परिचय लिखें ।

दोनों धरोहरों का नाम, स्थान, बनाने वाले का नाम, स्थान व विशेषता का वर्णन अवश्य करें ।

<https://youtu.be/fHmPDkio72w>

दिए गए लिंक से गतिविधि की सूक्ष्म जानकारी हासिल कर सकते हैं ।



# MATHS

## TOPIC: Art integrated project of mathematics (connecting state Manipur)

Aim:

- To integrate mathematics with day-to-day life.
- To learn mathematics using arts.
- To understand about vast and diverse culture heritage of Manipur.
- To search about mathematical concepts, use in different sections of life.
- Eg: dress design, buildings, dance forms, buildings, handicrafts.

Task 1 : Roll numbers from 1 to 9

Students will design the costume of Manipuri dance using mathematical concept of cylinder and other geometrical figures along with the concept of combination of figures.

Materials used: Waste papers, card sheets, dry leaves, laces. Or can make it using paper mashie.



[https://www.youtube.com/watch?v=ECEx7boJc\\_Q](https://www.youtube.com/watch?v=ECEx7boJc_Q)

Task 2: Roll numbers from 10 to 18

Student will take any architectural building from Manipur and find out their dimension and take proper ratio to make a model of it and explain which mathematical concepts are used in construction of these buildings.

Materials used: Card boards, newspapers dry leaves and flowers to decorate it.

Task 3: Roll No 19-27

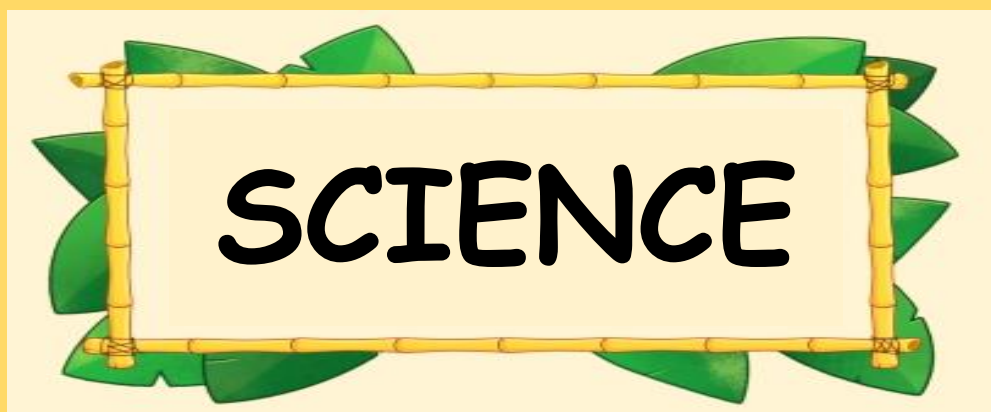
To create jewellery using cardboard and colourful papers using mathematical concepts.

Material required: Cardboard, colourful papers decorative material, string.

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

Take the help of above link, use your own creativity to make different type of jewelries like necklace, earrings, bracelets etc.





Select any ONE problem statement as per the roll numbers mentioned below and come up with an innovative solution in the form of a model.

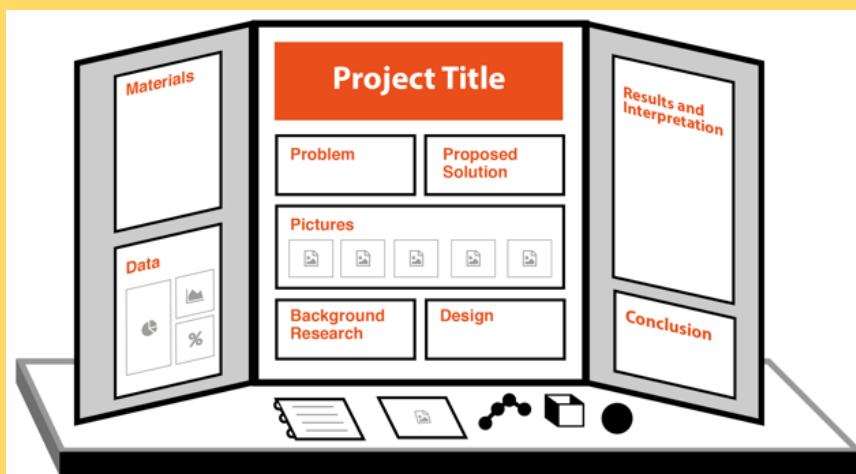
Roll numbers	Problem statements	Subject and Topic Integrated
1-7	<p><b>pH in Everyday life</b></p> <p>pH is very important in everyday life as the pH of the soil can lead to increased agricultural yield and the pH of oceans affects aquatic life. pH is also important in the digestion of food, stopping tooth decay, and acts as a remedy for the acidic effect of honeybee bite. Create a device which can be used to find pH.</p> <p><a href="https://youtu.be/Sew6Of3B12A">https://youtu.be/Sew6Of3B12A</a></p> <p><b>Circulatory System</b></p> <p>A working model helps to understand the details of that particular topic. Try making a working model of a heart and how blood runs through the arteries and veins. Also, research about atherosclerosis and its solution and figure out how you can depict the same on the model.</p>	<p><b>Chemistry – Acids, Bases and Salts</b> <b>Subtopic –pH</b></p> <p><b>Biology – Life Processes – Circulatory system.</b></p>

Roll numbers	Problem statements	Subject and Topic Integrated
8-14	<p><b>Chemistry in Everyday Life</b></p> <p>Chemistry is basically the study of everyday chemicals that are present around us and which can be applied in real life. Can we imagine our life without fuel or combustion, neutralization reactions, baking and fermentation. Through our project we shall show the importance of chemistry in everyday life</p> <p><b>Hemodialysis</b></p> <p>Hemodialysis is a solution to kidney problems. Can you depict the same as a working model and detail various controls such as pH and temperature regulation, blood pressure and pulse.</p>	<p><b>Chemistry- Chemical reactions and Equations</b></p> <p><b>Biology – Life Processes- Excretory system</b></p>
15-21	<p><b>Wastewater treatment plant</b></p> <p>Wastewater treatment is done to purify wastewater and to conserve water, as it is the need of the hour as per SDG-6. The work of WWTP will be shown wherein various stages through which wastewater is passed to obtain clean and potable water will be explained.  <a href="https://youtu.be/XnGVvBNiv9g">https://youtu.be/XnGVvBNiv9g</a></p> <p><b>Vertical Gardening</b></p> <p>One of the innovative solutions to combat pollution is vertical gardening. Have you ever wondered how it works? Try being an architect and design an official building with landscapes of vertical gardening keeping a few controls in mind such as sunlight, regular trimming, watering etc.</p> <p><b>Piezoelectric effect</b></p> <p>We often see large power cut out in our societies. for production of electricity, Piezoelectric crystals can be used. Generation of electricity by applying pressure will be shown through a working model. Use this technique for electricity production.</p>	<p><b>Biology – Our Environment</b></p> <p><b>Physics-electricity</b></p>

Roll numbers	Problem statements	Subject and Topic Integrated
21-28	<p><b>Purification</b></p> <p>Distillation treatment typically removes most of the dissolved materials. In addition, the boiling process kills biological contaminants. Develop a sustainable, feasible, and affordable methodology that will ensure the effective decontamination of ocean water.</p> <p><a href="https://youtu.be/qAZidlERHf0">https://youtu.be/qAZidlERHf0</a></p> <p><b>Hydroponics</b></p> <p>Hydroponics has been made into a reality by agriculturists. What is the principle behind. How is it that nutrients are enough for a plant to grow? Research and find out. Try making a working model depicting how hydroponics can be used to create a revolution in agriculture and farming.</p> <p><b>Waste to energy</b></p> <p>We generally see, large Garbage in our municipal garbage trucks. The waste to energy system is the mass burn system. in this system unprocessed municipal solid waste it's burnt in combustion chambers and the fire from burning produces energy using switch mode power supply connected in the circuits to produce electricity which can be also used to run different electrical appliances also</p>	<p><b>Chemistry – Acids, Bases and Salts</b></p> <p><b>Biology –Our Environment</b></p> <p><b>Physics-Energy conversion</b></p>

Any other project demonstration from any concept included in your curriculum can also be designed and presented.

**Format of displaying the information: -**





**Economics project**  
**Topic – Consumer Awareness**

A consumer is the person who hires or avails of any services for a consideration which has been paid or promised or partly paid and partly promised or under any system of deferred payment. But Consumer exploitation is very rampant these days. Consumers get exploited in many ways through the more dominant and knowledgeable sources. On the other hand, consumers must be aware not only of the commercial aspects of sale and purchase of goods but also of the health and security aspect. Besides this, they should be aware of their rights and duties being as rational human beings viz., price and quality of products used by them, about Fair Price Shops, standardization of products, about Consumer Forums etc. Therefore, Consumer exploitation should be bought down with proper awareness to the consumers on their rights and how they could go about with things, if they feel they have been cheated.

**Project should include:**

- Meaning of consumer awareness
- Rights and duties as a consumer
- Ways of consumer exploitation in the marketplace with narratives
- Survey of 5 people to know whether they are aware of their rights as a consumer or not.
- Example and model of a few goods or cases where you find consumer rights are violated.
- legal measures available to protect from being exploited in markets, case studies can be added.

**Please note:**

- Project should be made from eco-friendly products and preferably handwritten by you.
- The distribution of marks over different aspects relating to Project Work is as follows:

# ARTIFICIAL INTELLIGENCE

Topic : Role of AI in achieving SDG4(Quality Education)

Instructions:

- Research for 5 AI application /devices that can be used for achieving quality education.
- Categorize the applications in domains of AI(CV,NLP and Data Science).
- Explain the use of these Application/devices in achieving quality education

Template for explaining the project:

Present your work in the form of a PPT/scrap file /3D modeling software.

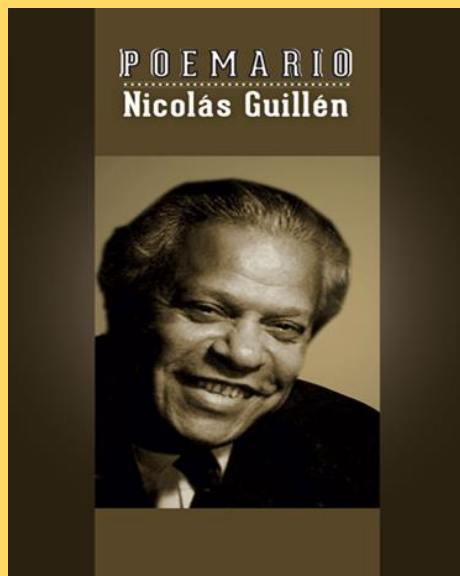
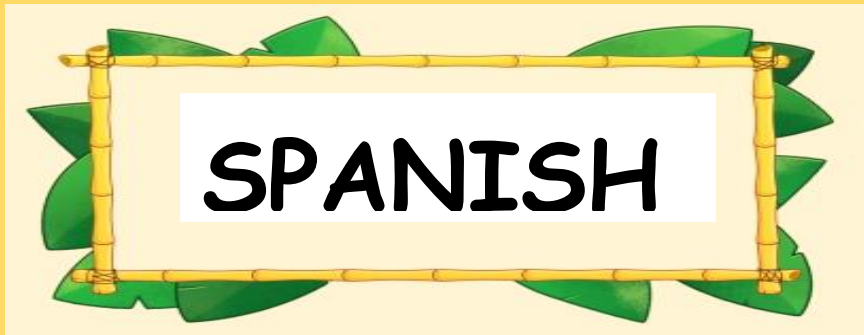
Picture



Explanations of Role of Application/Device in achieving Quality education. Explanation must include the advantages and disadvantage of using these applications.

Name of the Application/Device

AI domain



### **Creative Writing.**

Kindly write a brief description of Nicolas Guillen in 200-250 words on A3/A4 and include the following:

- Famous works- Motivos de son and Poemas mulatos
- -How has he contributed to Literature.

The following link to know in detail about the author

[https://www.biografiasyvidas.com/biografia/g/guillen\\_nicolas.htm](https://www.biografiasyvidas.com/biografia/g/guillen_nicolas.htm)



### Creative Project

Let's do some French creative writing work during these summer holidays

- Écoutez une histoire la plus connue de << Petit Prince>>, rédigez-la dans vos mots en utilisant le passe composé et l'imparfait (60 – 80 mots). Dessinez des personnages ou utilisez des images de l'internet.
- Go to the link <https://youtu.be/ZUhRSj8GgDM>
- A sample for reference has been given below.

