



# DAV PUBLIC SCHOOL

UPPAL'S SOUTHEND, SECTOR 49, GURUGRAM

## HOLIDAYS HOMEWORK CLASS X

SESSION : 2026-27





Dear Students

Holidays are a much awaited time that bring joy, relaxation, and the chance to unwind from the regular routine. They offer a perfect opportunity to explore your interests, spend quality time with family, and rejuvenate your body and mind. However, holidays become truly meaningful when we strike a balance between fun and learning. This holiday homework is designed not as a burden, but as a joyful journey filled with creative activities, reflection, and light academic practice. Engage with it at your own pace, stay curious, read something new, and don't forget to laugh, play, and spread happiness. Remember, a happy heart learns best. Wishing you a refreshing and fruitful vacation!

**HAPPY  
HOLIDAYS!**



# ENGLISH

Complete the following from Competency Based booklet .

Multiple Assessment Activity	Page no 53, 54, 59
Reading comprehension 1-2	Page no 1,2,34
Writing	Practice question 1,2,3 on page 26
Portfolio	Page no 66, 67, 74, 75

# HINDI

निम्नलिखित पृष्ठों का पोर्टफोलियो और बहुविध मूल्यांकन (multiple assessment) से संबंधित सभी गतिविधियाँ पूर्ण कीजिए।

पृष्ठ संख्या (1-7) (19-26) (77-84) (93-99)

# SANSKRIT

संस्कृतस्य अधिन्यास - पुस्तके अधोलिखितेषु पृष्ठेषु प्रदत्तानि कार्याणि कुर्वन्तु।

पृष्ठसंख्या: -

1, 2, 3, 4, 5, 57, 58, 59, 66, 67

# MATHEMATICS

TASK: Make Holidays homework Register and do the following from Assignment Booklet:

1. Assignment of Chapter-1 Real numbers
2. Assignment of Chapter- 2 Polynomials
3. Assignment of Chapter- 3 Pair of Linear Equations in Two Variable
4. Assignment of Chapter- 4 Quadratic Equations
5. Assignment of Chapter- 6 Coordinate Geometry
6. Assignment of Chapter- 9 Introduction to Trigonometry

Also, Multiple Assessment Activities and Portfolio of the same chapters.

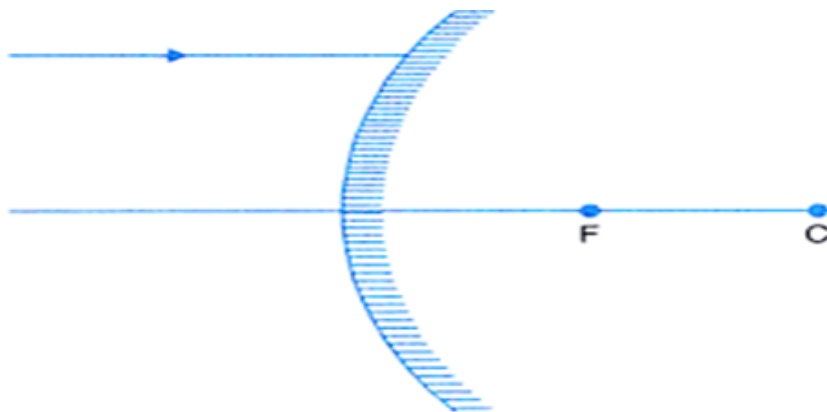
# SCIENCE

## PHYSICS

### CH- LIGHT (REFLECTION AND REFRACTION)

Complete the following questions in your Physics Notebooks

1. An incident ray makes an angle  $35^\circ$  with the surface of a plane mirror. What is the angle of reflection?
2. Name the spherical mirror which:
  - (a) has a positive focal length
  - (b) always forms a virtual image
3. The outer surface of a hollow sphere of aluminium of radius 50 cm is to be used as a mirror. What will be the focal length of this mirror? Which type of spherical mirror will it provide?
4. Redraw the diagram given below in your answer book and show the direction of the light ray after reflection from the mirror.



5. What is the nature of the image formed by a concave mirror if the magnification produced by the mirror is:

(a) +3      (b) -1

Predict the size of image in both the cases.

6. Define the focus of a concave mirror. If the radius of curvature of a convex mirror is 30 cm, what would be its focal length?

7. State and explain the laws of reflection of light with the help of a labeled ray diagram.

8. List two possible ways in which a concave mirror can produce a magnified image of an object placed in front of it. State the difference, if any, between these two images.

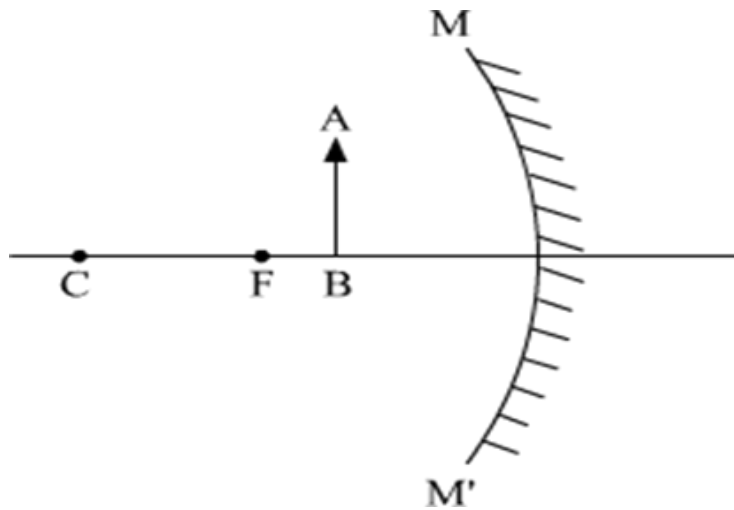
9. The radius of curvature of a rear-view mirror in a car is 4m. If a truck is behind the car, located 5m from the rear-view mirror of the car. Calculate the size of the image relative to the size of the truck and also find the position and nature of the image formed.

10. An optical device has been given to a student and he determines its focal length by focusing the image of a sun on a screen placed 24 cm from the device on the same side of the sun.

(a) Name the optical device

(b) Find its focal length.

11. Draw the following diagram in your answerbook and show the formation of image of the object AB with the help of suitable rays.



12. Draw ray diagrams to show the image formation by a concave mirror

- For an object placed at the focus (F).
- For an object placed between centre of curvature (C) and focus (F)

13. A 4 cm needle is placed 12 cm away from a convex mirror of focal length 15 cm. Give the location of image and magnification. What happens to the image if the needle is moved further away from the mirror?

14. A spherical mirror produces an image of magnification -1 on a screen placed at a distance of 50 cm from the mirror.

- Write the type of mirror.
- Find the distance of the image from the object.
- What is the focal length of the mirror?
- Draw the ray diagram to show the image formation in this case.

15. An object 2 cm in size is placed 30 cm in front of a concave mirror of focal length 15 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? What will be the nature and the size of the image formed? Draw a ray diagram to show the formation of the image in this case.

## **CHEMISTRY**

1. Complete the SRC of Lesson 1 and 2
2. Multiple Assessment of Lesson 1 and 2  
(Do Assignment in notebook)

## **BIOLOGY**

1. Complete the SRC of Lesson 5 page 2 and 3 of Assignment booklet.
2. Multiple Assessment page 15 of Assignment booklet.
3. Assignment of lesson 5- page 25 to page 29 of Assignment booklet.  
(Do Assignment on separate A4 sized sheets)

# SOCIAL SCIENCE

Every student has to compulsorily undertake one project on Sustainable Development

Objectives: The learners will:

- gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from an interdisciplinary perspective.
- enhance their Life Skills
- apply the Social Science concepts that they have learnt over the years in order to prepare the project report.
- go out for collecting data and use different primary and secondary resources to prepare the project. If possible, various forms of art may be integrated in the project work.



Sustainable development is the pathway to the future we want for all.

The 17 Sustainable Development Goals (SDGs) were adopted by all United Nations Member States in 2015 to end poverty, reduce inequality and build more peaceful, prosperous societies by 2030 are there to empower globally. Countries around the world have committed to act together to meet these goals.

Quality Education Goal empowers the global young minds with the knowledge, skills, values and attitudes to address the interconnected global challenges, to fight against the climate changes - carbon footprint, forestation, e-waste, environmental degradation, loss of biodiversity, poverty and inequality. To understand SDGs, refer to the picture below:



Practicing sustainability empowers children to construct knowledge, explore values and develop respect towards nature, which lays the foundations for an environmentally responsible adulthood in the next future. Everyone has a right to live in a safe, clean, and healthy environment. Education is crucial in engaging students in the shaping and provision of essentials to future generations while preserving the environment. The SDGs are universal goals for everyone and are inherently global in nature. Learning about these initiatives help students develop insight into issues faced around the world.


## 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Let us understand the meaning of SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION GUIDELINES:

Things to be kept in mind while doing the project.

Follow CBSE guidelines strictly.

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- Activity 4
  - Activity 5
  - Activity 6
  - bibliography
  - conclusion
  - Reflections (\* Performa given in the attached document)

Activity 1: Explain the meaning of SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Now use solution-oriented thinking to answer the following questions:

Activity 2: Answer the given questions in your scrap files: (\* Performa given in the attached document)

- Do an inventory of the items in your fridge and your closet. Where do they come from? (Minimum 5)
  - Where were they made?
  - What do you actually use or consume out of it?
  - What goes to waste? What can I do day-to-day to consume and produce more responsibly?
  - How do your purchases affect the global economy?
  - Why is it difficult to be a responsible consumer in today's day and age?



Activity 3: (\* Performa given in the attached document) Paste the picture/ wrappers of the packaging of the items of your inventory list.

Activity 4: Examine advertisements (particularly related to your inventory list items) that you come across every day on your phone, magazines, or on T.V. What persuasive strategies do they use to make you want to buy their product? (write your observations in your scrap files)


Activity 5: (\* Performa given in the attached document) • Redesign a package (any one item of your inventory list.) to make it more sustainable? (Paste the picture of your packaging idea in the scrape file) (use the actual packaging for presentation in the class)

- Design a pamphlet/ advertisement to promote your packaging idea with a catchy tagline.
- Presentation of the packaging and the pamphlet/ advertisement will be done in class.

Activity 6: How can we raise awareness about responsible consumption in our community?

The distribution of marks over different rubrics relating to Project Work is as follows:

S. No	Rubrics	Marks
a.	Content accuracy, originality and collaborative skills	2
b.	Competencies exhibited and Presentation	2
c.	Viva	1



Education for Sustainable Development empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity.

**ACTIVITY 2**  
**QUESTIONNAIRE**

1. Do an inventory of the items in your fridge and your closet. Where do they come from? (Minimum 5)
2. Where were they made?
3. What do you actually use or consume out of it?
4. What goes to waste? What can I do day-to-day to consume and produce more responsibly?
5. How do your purchases affect the global economy?
6. Why is it difficult to be a responsible consumer in today's day and age?



### ACTIVITY 3

Paste the picture/ wrappers of the packaging of the items of your inventory list.

1.



2.





3.

A large, empty rectangular box with a double black border, intended for writing the answer to question 3. The box is positioned in the upper half of the page.

4.

A large, empty rectangular box with a double black border, intended for writing the answer to question 4. The box is positioned in the lower half of the page.



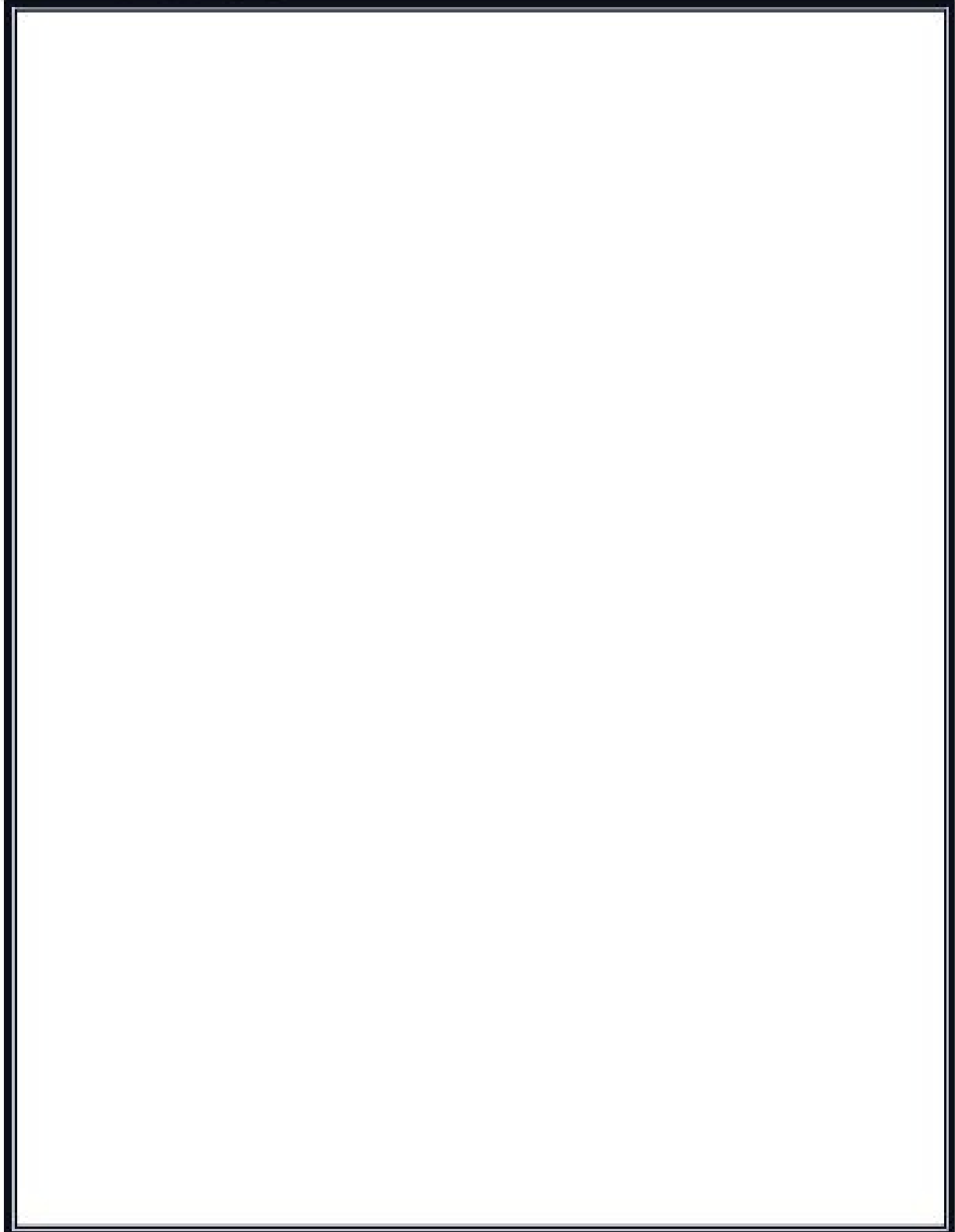
5.



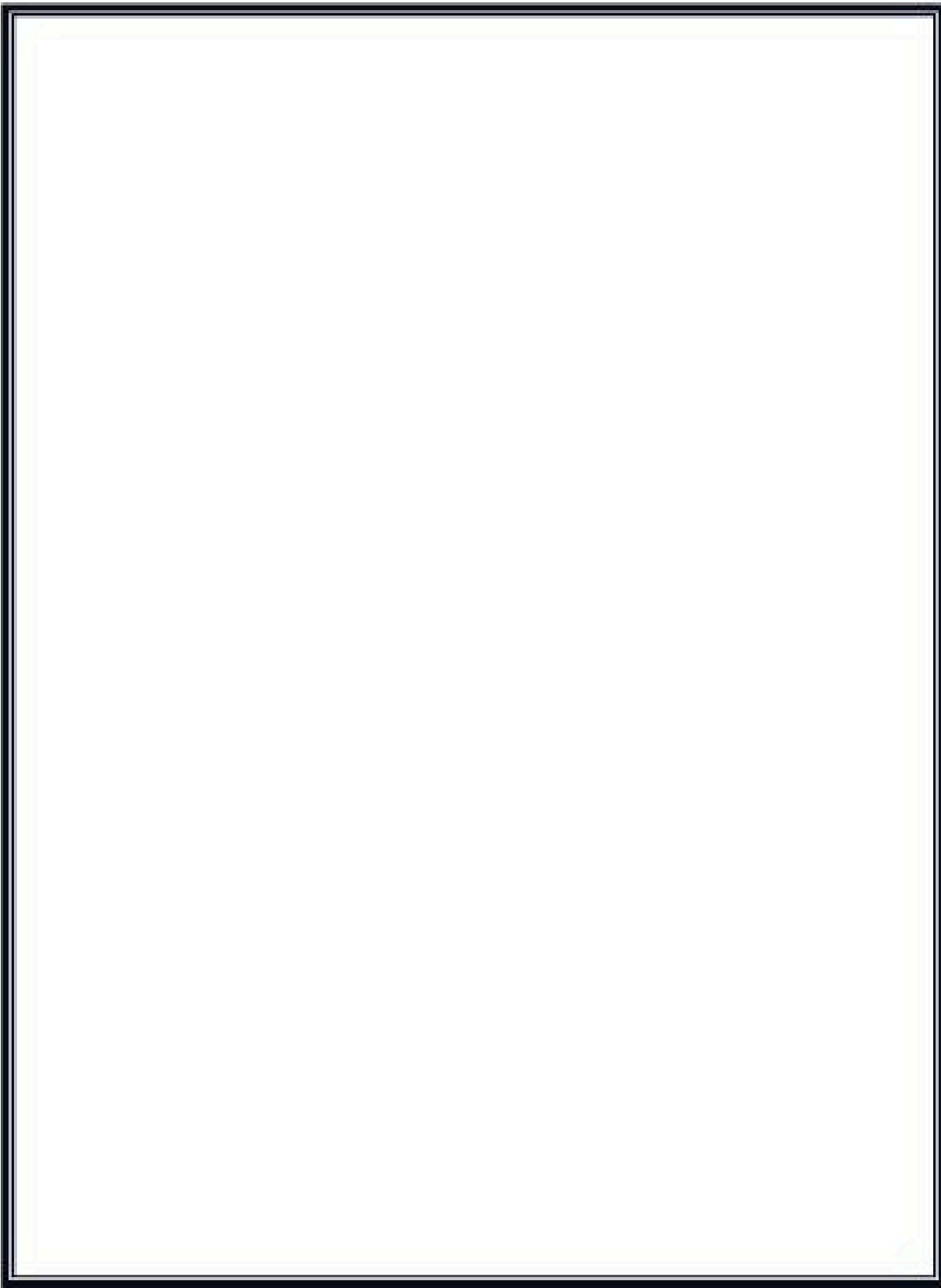


**ACTIVITY 5**

Picture of your packaging idea:



Pamphlet/ Advertisement (of your packaging idea)





## ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my Social Science teacher \_\_\_\_\_ as well as our school Principal \_\_\_\_\_ who gave me the golden opportunity to do this wonderful project on the topic \_\_\_\_\_, which also helped me in doing a lot of research and I came to know about so many new things I am really thankful to them.

Secondly, I would also like to thank my parents and friends who helped me a lot in finishing this project within the limited time.

I am making this project not only for marks but to also increase my knowledge.

THANKS AGAIN TO ALL WHO HELPED ME.





## REFLECTIONS

While working in this project I have learnt 4 C's of 21<sup>st</sup> century Creativity, Collaboration, Critical Thinking and Communication.

Apart from that this project encouraged us to work together, gather information from internet improve our thinking skills and share our knowledge with each other.

This project had also taught me to be

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I was given about a week time to complete each stage of the project. I also enjoyed doing this project as I spent time with friends to complete this project.





In addition to your holiday homework, you are required to complete the following in your Competency Based Assignment Booklet

### 1. ASSIGNMENT

Chapter 1: Resources and Development

Chapter 2: Forest and Wildlife Resources

Chapter 1: Power Sharing

Chapter 2: Federalism

Chapter 1: Development

### 2. MULTIPLE ASSESSMENT

Chapter 1: Resources and Development

Chapter 2: Forest and Wildlife Resources

Chapter 1: Power Sharing

Chapter 2: Federalism

Chapter 1: Development

### 3. PORTFOLIO

Chapter 1: Resources and Development

Chapter 2: Forest and Wildlife Resources

Chapter 1: Power Sharing

Chapter 2: Federalism

Chapter 1: Development





# INTRODUCTION TO TOURISM

Poster Making Make a colourful poster on any one topic:

“Atithi Devo Bhava”

“Clean Tourism,  
Green Tourism”

“Be a Responsible Tourist”

“Unity in Diversity through Tourism”

Use slogans, drawings, and creativity.

## HOME SCIENCE

Complete practical no. 1 to 6 in practical file as directed in the class. ROCKING DOLL and MOBILE should be presentable and self prepared.





# APPAREL

Topic: Traditional Indian Embroidery Styles

Students are required to prepare 4 handkerchiefs, each showcasing a different traditional embroidery style:

1. Sindhi Embroidery
2. Kasuti Embroidery
3. Kantha Embroidery
4. Phulkari Embroidery


Instructions: Use neat and clean fabric pieces/handkerchiefs. Each handkerchief should display the basic stitches and motifs of the respective embroidery style.

Maintain proper finishing and presentation.

Mention the name of the embroidery style on each sample. Submit all samples properly labelled in a folder/file.

Learning Outcome:

This activity will help students understand:

- Traditional Indian textile crafts
  - Different embroidery techniques and stitches
  - Creativity and fabric embellishment skills
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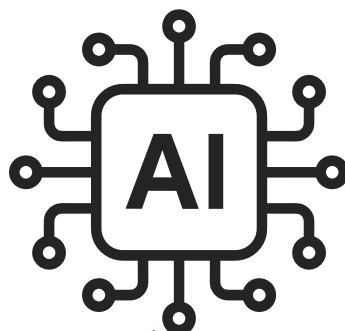
# ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is transforming the way we live, learn, and work. From voice assistants and smart phones to self-driving cars and online recommendations, AI has become an important part of our daily lives. Learning about AI helps students develop creativity, problem-solving skills, and a better understanding of future technologies.

During the holidays, you will be exploring the exciting world of AI through two interesting assignments designed to enhance your knowledge, imagination, and practical understanding of this emerging technology. Complete the tasks in your AI Notebook with creativity and enthusiasm while enjoying your learning journey.

We are also sharing AI and Employability Skills book in the drive link mentioned below along with the assignments mentioned above.

**CLICK AI ICON(Given Below) FOR DRIVE LINK**





# PAINTING

## LIPAN ART ON CARDBOARD

Materials Required:


- Thick Cardboard (A2 Size)
- Fevicol
- Mouldit / Clay / POP mixture
- Acrylic Colours
- Small Mirrors
- Paint Brushes
- Pencil & Eraser
- Scale
- Ear Bud / Dotting Tool
- Water Bowl
- Colour Palette

### Introduction

Lipan Art is a traditional folk art form from Gujarat. It is created using clay work, raised designs, mirrors, and decorative patterns. This activity helps students explore Indian traditional art with creativity and texture work.

Steps to Make Lipan Art Step 1: Prepare the Base Take a thick cardboard base. Cover it neatly with plain sheet or paint the background colour. Let it dry completely.

Step 2: Draw the Design Draw a simple design of your choice using pencil. Suggested Themes: Mandala Peacock Camel Floral patterns Tree of life Traditional geometric patterns



Step 3: Prepare Clay Outline Mix mouldit/clay properly. Roll thin clay strips using fingers. Paste clay carefully on pencil outlines using Fevicol.

Step 4: Add Mirrors Paste small mirrors between patterns. Use different mirror shapes: Round Square Diamond

Step 5: Paint the Artwork Paint the entire design using acrylic colours. Suggested Colour Themes: White on brown background Multicolour traditional style Black and silver Earthy tones

Step 6: Dot Decoration Use ear buds, pencil back, or brush handle for dot painting. Add colourful dots around mirrors and borders.

