



**BHAVDIYA PUBLIC SCHOOL AYODHYA**  
**SUMMER VACATION HOMEWORK (2025-26)**  
**CLASS-X**

**MATHS :-**

**Do research and make a project on any one of the given topics**

1. Pythagoras Theorem-Proofs other than given in the present textbook.
2. Application of Geometry in day-to-day life
3. Application of Algebra in day-to-day life.
4. Application of Mensuration in day-to-day life.
5. A working model on any topic related to Mathematics.

**Note**

- Use A4 sheet or graph sheet or chart paper only.
- Don't share your project with other students.
- Project should be art integrated.
- Don't use plastic cover or files, your project will be ecofriendly.
- Last page of your project should contain 10 simple Questions/Answers based on your project.

**ENGLISH**

Elucidate the poetic devices of the two poem in your curriculum

\* Dust of Snow

\* Fire and Ice

Do research work and analyse the recent operation done by Indian Armed Forces 'Sindoor' and pen down the gathered information in an A4 sheet.

Write a note on Autobiography of Nelson Mandela 'A long walk to Freedom'.

Write a letter to God keeping your upcoming board examination in your mind in 100-120 words.

Note: Your Homework needs to be done in A4 sheet.

Keeping hand writing and presentation in mind it should be compiled.

**HINDI:-**

1. कभी आपको पारंपरिक रामलीला अथवा राम कथा की नाटक प्रस्तुति देखने का अवसर मिला होगा उस अनुभव को अपने शब्दों में लिखिए।
2. नेताजी सुभाष चंद्र बोस के व्यक्तित्व और कृतित्व पर एक प्रोजेक्ट बनाइए।

**SCIENCE**

**CHEMISTRY:-**

1. Do Chemistry-

Project: students will make model on the following topics

FOR ROLL NO 1 TO 10

A) Make chart on '20 balanced chemical equations'.

FOR ROLL NO 11 TO 20

B) Make chart on 'types of chemical reactions'.

FOR ROLL NO 20 TO LAST

C) Make chart on 'Indicators and types of indicators'.

2. Make a brochure on Andaman and Nicobar air quality index and air and water pollution on A4 size sheet .

## **BIOLOGY:-**

1. Prepare a balanced diet chart which you will follow during the summer break. Make sure it is date wise and the picture of your meal according to the balanced diet should be attached. ( Do it in biology practical copy)
2. Solve the intext and exercise questions from the chapter life processes.

## **PHYSICS:-**

### 1 ACTIVITY – CHART MAKING

Prepare the chart and explain the given topic with proper diagram and illustrations.

Roll no 1 to 10 --- Describe the reflection phenomenon and Laws of reflection.

Roll no 11 to 20 --- Describe the image formation by spherical mirrors.

Roll no 21 to 30 --- Describe the refraction phenomenon and Laws of refraction.

Roll no 31 to 40 --- Describe the refractive index (absolute and relative) and various expressions.

### 2 Activity

Take a large shining spoon. Try to view your face in its curved surface. Do you get the image?

Is it smaller or larger?

Move the spoon slowly away from your face. Observe the image. How does it change?

Reverse the spoon and repeat the Activity. How does the image look like now?

Compare the characteristics of the image on the two surfaces.

### 3 Activity

CAUTION: Do not look at the Sun directly or even into a mirror reflecting sunlight. It may damage your eyes.

Hold a concave mirror in your hand and direct its reflecting surface towards the Sun. Direct the light reflected by the mirror on to a sheet of paper held close to the mirror. Move the sheet of paper back and forth gradually until you find on the paper sheet a bright, sharp spot of light.

Hold the mirror and the paper in the same position for a few minutes.

What do you observe? Why?

4 a) Find the focal length of a convex mirror whose radius of curvature is 32 cm.

b) A concave mirror produces three times magnified (enlarged) real image of an object placed at 10 cm in front of it. Where is the image located?

5 a) A convex mirror used for rear-view on an automobile has a radius of curvature of 3.00 m. If a bus is located at 5.00 m from this mirror, find the position, nature and size of the image.

b) An object, 4.0 cm in size, is placed at 25.0 cm in front of a concave mirror of focal length 15.0 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? Find the nature and the size of the image.

## **SOCIAL SCIENCE:**

### **HISTORY**

1. "culture played an important role in creating the idea of the nation" support the statement with examples

2. Complete the project work

Topic. The rise of nationalism in Europe

Complete the given worksheet in your fair copy.

### **POLITICAL SCIENCE**

1. Make a table of national parties of India and write about ideology, party membership, seats, founder leaders, founding date along with the party symbols.

### **GEOGRAPHY**

1. Make a project file from chapter 'Lifeline of National Economy' on National Highways (Golden Quadrilateral, North- South Corridor, East – West Corridor) and also Major Ports & some International Airports. (Do it in a 'Lace File' on A4 size paper)

Project Structure

Introduction - A brief overview of the project's topic and objectives.

Body - Detailed information including characteristics, significance, and examples.

Conclusion - A summary of the key findings and a reflection on the importance of National Highways, Major Ports and International Airports.

### **ECONOMICS**

1. Prepare a project report on Sustainable Development as a great objective of G-20 Summit 2023-India.

### **COMPUTER:**

As part of your summer vacation learning plan, you are assigned the following Information Technology Holiday Homework. These tasks aim to enhance your digital skills, creativity, and self-awareness. You will also be attending a mandatory IT Bootcamp/Webinar during the summer vacation. The link and schedule will be shared shortly in the class group.

#### 1. Digital Documentation Task (Chapter-Based Activity)

Create a formal letter using any word processing software (Liber Office Writer):

Topic: "Application to the Principal for Leave During Summer Vacation"

Apply the following features:

Font styles (Bold, Italic, Underline)

Paragraph alignment and line spacing

Bullets or numbering

Insert a table (minimum 1)

Header and Footer

Save and submit your work as a PDF.

#### 2. Choose Any One Creative Task

a) Digital Poster: "Cyber Safety and Responsible Use of the Internet"

b) Presentation: "Digital India Mission"

c) Report: "IT Tools I Use in Daily Life"

d) Resume Creation: Make your resume using MS Word, Canva, or any online tool

e) Career Path in IT: Choose one IT career (e.g., Web Developer, Data Analyst, Ethical Hacker) and write a short report about its scope, required skills, and future prospects

#### 3. Daily Mindfulness and Self-Management Task

To support your personal growth and mental well-being:

Practice 5–10 minutes of meditation daily (you may use apps like Medito, Headspace, or simply sit quietly focusing on your breath)

Maintain a self-reflection journal and write weekly entries on:

Your strengths & Your weaknesses

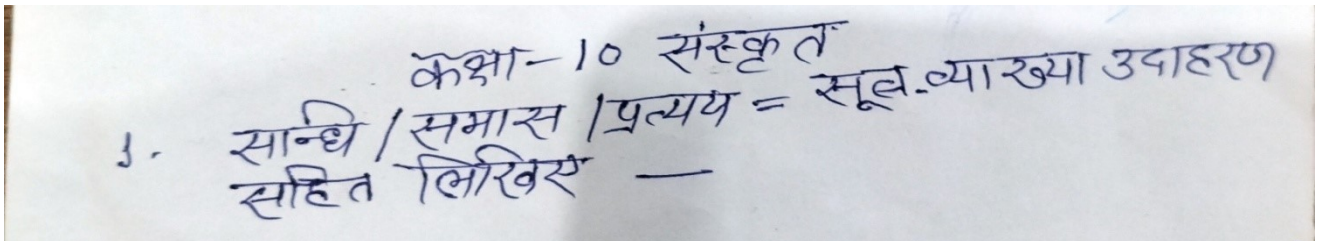
How you are improving your self-discipline, focus, or stress management

### **Important Notes:**

Attendance in the IT Boot camp Webinar (during summer vacation) is compulsory

Be creative, original, and sincere in your efforts

Use technology responsibly and enjoy the learning process!



**Note: Do all written homework of all the subjects except charts/posters/modals in fair Notebook only.**