

MGN PUBLIC SCHOOL, ADARSH NAGAR, JALANDHAR
HOLIDAYS HOME WORK JUNE / JULY (2025)

CLASS X

ENGLISH

I. READ ANY ONE OF THE FOLLOWING NOVELS DURING THE SUMMER BREAK AND WRITE ITS REVIEW IN YOUR CLASS WORK NOTEBOOK IN NOT MORE THAN 150-200 WORDS.

Novel will be Assessed during Speaking Skills Assessment and marks will be awarded in Internal Assessment.

1. THE INVISIBLE MAN BY H.G. WELLS. OR

2. THE DIARY OF A YOUNG GIRL BY ANNE FRANK

NOTE: BOOKS CAN BE VIEWED FROM THE GIVEN LINKS.

<https://u.pcloud.link/publink/show?code=XZtBNfXZubiWTAQUFM7k4fsSmqOnWFMvnWS>

<https://freeditorial.com/en/books/the-diary-of-a-young-girl>

Poetic Devices Worksheet

II. In the same notebook write the definitions and examples of the poetic devices given below .

1. Alliteration -
2. Onomatopoeia-
3. Allusion-
4. Metaphor-
5. Paradox -
6. Personification-
7. Simile-
8. Symbolism-
9. Enjambment-
10. Repetition-
11. Transferred Epithet-
12. Imagery-
13. Assonance-
14. Humour -
15. Poetic Licence-
16. Irony-
17. Anaphora-
18. Hyperbole.

III. Letters:

Write the following letters in the notebook.

Letters of complaint

1. A You had bought an iPad from Indian Electronics, Gurugram. But it has developed a problem. Write a letter of complaint to the Manager in about 120 words, asking for repair or replacement of the same. You are Sumit/Shreya of 26, Gandhi Nagar, Gurugram.

1.B You recently visited a government hospital.You were shocked to see the poor state of sanitation.Write a letter to the Director of Health Services requesting him to pay urgent attention to this situation and take remedial measures.You are Lokesh/Lalita,D-76, Anandpur, Delhi.

Letter to the Editor

2A. Stakeholders associated with education of children are concerned about the poor reading habits of students these days.There are multiple reasons for the same like academic pressure, social media, video games addiction, etc.As a concerned citizen, write a letter to the editor in about 100-120 words,expressing your concern. Suggest some ways in which children could be directed towards this habit of reading books. You are Madhav/Madhavi of 150,Gujral Nagar, New Delhi.

2.B.Roadside vendors occupy most of the space on roads disturbing the flow of traffic and causing difficulties even to the pedestrians. Write a letter to the Editor of a national daily, in about 120 words expressing your views and suggesting ways and means to curb this problem. You are Rosie/Roshan,15 Navkunj Apartments, Delhi.

IV.Read the English Newspaper daily.

V.Revise the syllabus of English covered in class.

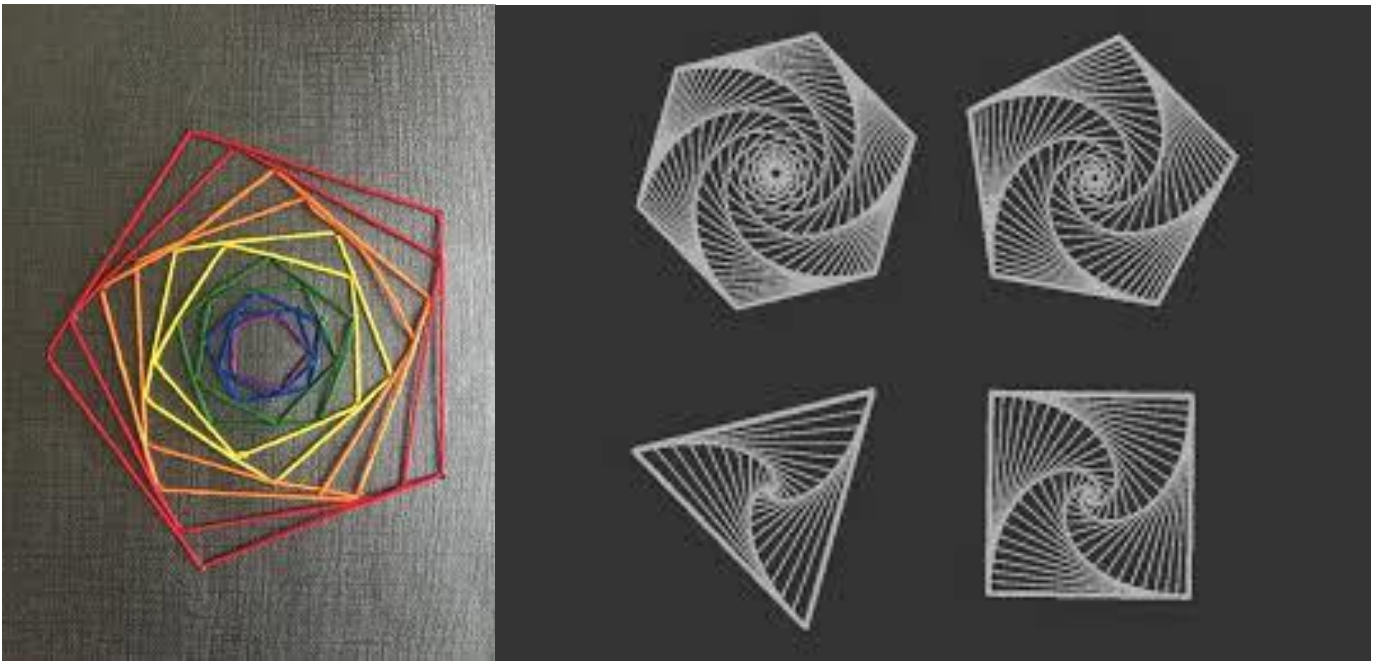
MATHEMATICS

SUMMER HOLIDAYS'HOMEWORK – MATHEMATICS [CLASS X]

TASK 1 MATH MARVELS EXPO ----- *Activities by Roll Number*

Roll Number 1-10

Task: Use string art to create any 2 mathematical shapes and elaborate the mathematical concept involved in it on an A3 sheet.



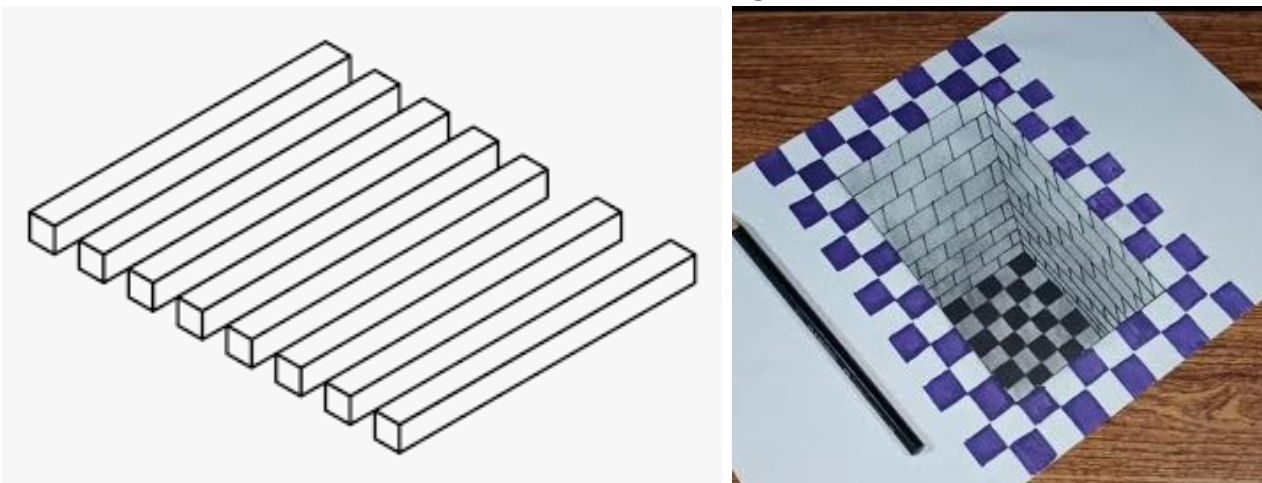
Reference Video: <https://www.youtube.com/watch?v=yhZJfaQB9k0>

✦ Roll Number 11-20

Task: Create 2 mathematical illusions on an A3 sheet.

Focus on geometric and visual tricks based on math principles.

Example for reference: Optical illusions involving shapes, lines, and patterns.



✦ Roll Number 21-30

Task: Make a working model to verify the Basic Proportionality Theorem (BPT).

Reference Videos:

- BPT Model 1 <https://www.youtube.com/watch?v=uLapPjh-m64>
- BPT Model 2 <https://www.youtube.com/watch?v=we-A0kDJAgA>

Roll Number 31-40

Choose ONE of the following:

1. Clinometer Model – Instrument to measure height of a distant object using trigonometry.

Reference: Clinometer Tutorial <https://www.youtube.com/watch?v=gHeiueRpX7U>

2. Working Model on Trigonometry

Reference: Trigonometry Model <https://www.youtube.com/watch?v=N5JJKh-xJjU>

Roll Number 41-50

Choose any one working model based on:

- Area related to circles
- Circles
- Arithmetic Progressions
- Surface Areas and Volumes

TASK 2 DAILY PRACTICE

Visit the CBSE site every day for 20 days and solve the “Question of the Day” from the Maths section.

 CBSE AQAD – Daily Question

<https://aqadcbse.mindspark.in/index.php?class=10&language=en>

Maintain a notebook for solving these questions regularly.

NOTE: Revise the syllabus done so far.

SCIENCE

CLASS X Holidays HHW

Q1. Concave mirror produces three times enlarged image(real)of an object placed at 10 cm in front of it. Calculate the radius of curvature of the mirror.

Q2. A student focussed the image of a candle flame on a white screen using a concave mirror. The situation is as given below

length of the flame=1.5 cm

focal length of the mirror =12 cm distance of flame from the mirror=18cm

If the flame is perpendicular to the principal axis of the mirror then calculate the following :

- a) Distance of the image from the mirror
- b) Length of the image

If the distance between the mirror and the flame is reduced to 10 cm, then what would be observed on the screen ? Draw ray diagram to justify your answer for this situation

Q3. a) Define the following terms in the context of spherical mirrors

- Pole
- Centre of curvature

- Principal axis
- Principal focus

Q4. The image formed by a spherical mirror is real, inverted and is of magnification -2. If the image is at a distance of 30 cm from the mirror, where is the object placed? Find the focal length of the mirror. List the two characteristics of the image formed if the object is moved 10 cm towards the mirror.

Q5. Place a coin at the bottom of an empty bowl or cup. Ask your friend to stand at some distance from where the coin is not visible. Now pour some water in that bowl or cup.

- a) Is the coin not visible to your friend after some water is poured into the cup?
- b) Which phenomenon is responsible for your observation?

Q6. The speed of light in water is $2.25 \times 10^8 \text{ m/s}$. If the speed of light in vacuum be $3 \times 10^8 \text{ m/s}$, calculate the refractive index of water.

Q7. The refractive index of water with respect to air is $4/3$. What is the refractive index of air with respect to water?

Q8. At what distance from a concave lens of focal length 20 cm a 6cm tall object be placed so as to obtain its image at 15 cm from the lens? Also calculate the size of the image formed.

Q9. The image of an object formed by a lens is of magnification -1. If distance between the object and its image is 60 cm, what is the focal length of the lens? If the object is moved 20 cm towards the lens, where would the image be formed? State reason and also draw a ray diagram in support of your answer.

Q10. How are power and focal length of a lens related? You are provided with two lenses of focal length 20 cm and 40 cm resp. Which lens will you use to obtain more convergent light?

Q11 Write a short note on revolution of technology in future for example futuristic cars, planes, your gadgets etc.

Bio/ Chem.

Q12. Write name and chemical formula of any 20 compounds that you have come across in chapter 1 and chapter 2

Q 13. Write any five things in your notebook that you have done in your vacation to conserve the natural resources to save the environment.

Q 14. Write the reactivity series of metals in the notebook and then write two reactions each of combination, decomposition and double displacement.

Out of the following models make any one model, forming a group of 8 to 10 students.

1. Web/Food Chain Model:

- * Concept: Illustrating the flow of energy in an ecosystem and the relationships between organisms.
- * Materials: Chart paper/cardboard, pictures or drawings of various plants and animals (producer, primary consumer, secondary consumer, tertiary consumer, decomposer), string/yarn, glue, scissors.
- * How it Works: Arrange the organisms on the chart paper and use strings to show the "who eats whom" relationships, forming interconnected food chains to create a food web.
- * Learning Outcome: Understanding producers, consumers, decomposers, trophic levels, and the interconnectedness of life in an ecosystem.

2. DNA Double Helix Model:

- * Concept: Visual representation of the DNA structure, including the sugar-phosphate backbone and nitrogenous bases.
- * Materials: Different colored beads (four colors for bases, two for sugar and phosphate), craft wire or pipe cleaners, stand (cardboard, thermocol).
- * How it Works: Construct two parallel strands with sugar and phosphate beads, then connect them with pairs of nitrogenous base beads (A-T, G-C) to form the double helix.
- * Learning Outcome: Understanding the structure of DNA, base pairing rules, and the concept of a double helix.

2. Working Model of a Stomata .

(Opening and Closing):

- * Concept: Demonstrates how stomata open and close to regulate gas exchange and transpiration in plants.
- * Materials: Two balloons, a plastic bottle (top part cut), tape, straws, a large cardboard cutout of a leaf.
- * How it Works: The balloons represent guard cells. By manipulating air pressure (e.g., blowing into a straw connected to the balloons), you can show how they swell and open, and relax and close, resembling the stomatal action.
- * Learning Outcome: Understanding the function of stomata, guard cells, and their role in photosynthesis and transpiration.

SOCIAL SCIENCE

MGN PUBLIC SCHOOL, ADARSH NAGAR, JALANDHAR

CLASS: X

HOLIDYS HOMEWORK, SOCIAL SCIENCE

INSTRUCTIONS:

- **This Project is a part of internal evaluation as given by CBSE, so it is mandatory for each student to do it.**
- **This project should be handwritten, and credit will be awarded to original drawings & illustrations & use of ecofriendly material.**
- **The project must be done on a project file whose one side is ruled & the other side is plain.**
- **Pictures can be taken from magazines/newspapers.**
- **Project should be neatly done.**

The project is to be submitted by 21st July,2025

I. Make an Infographic Project Report

Topic: The Consumer Rights (L-5 of Economics)

Project Objective

To help students understand their role as consumers, learn about their rights, recognize exploitation, and become aware of the redressal mechanisms available in India.

Project Guidelines

Each student will prepare a project report on the topic “Consumer Rights in India” that will include the following sections

Cover Page and Introductory Pages

- Title: *Consumer Rights in India*
- Student's Name, Class, Roll Number
- School Name
- Index
- Acknowledgement

Introduction

- Who is a consumer?
- Importance of consumer rights in a growing economy like India.

Personal Experience as a Consumer

- Describe **any real-life incident** where you or a family member was **exploited or cheated as a consumer**. (Example: incorrect MRP, expired goods, misleading advertisement, defective product, etc.)
- If possible, **attach any proof** (like bill, photo of expired product, email/chat complaint, etc.).
- Mention what **steps were taken**:
 - Did you confront the seller?
 - Did you file a complaint?
 - Did the issue get resolved
 - *If you don't have personal experience, you may narrate an incident from newspapers or online sources (but mention the source clearly).*

Research-Based Section: Rights of a Consumer

Explain the **six main consumer rights** with short examples:

1. **Right to Safety**
2. **Right to be Informed**
3. **Right to Choose**
4. **Right to be Heard**
5. **Right to Seek Redressal**
6. **Right to Consumer Education**

You may use creative headings, icons, or sketches to make it visually interesting.

Redressal Mechanism in India

- Brief explanation of how and where a consumer can file a complaint (District/State/National Commission).
- Mention **Consumer Helpline, Jago Grahak Jago**, and **Online portals** like <https://consumerhelpline.gov.in>

Conclusion

- What did you learn from this project?
- How will you behave as a consumer in the future?

Bibliography

- **Mention the list of sources that you referred to while researching.**

II.

Interdisciplinary Project through History, Geography, and Economics

Project Aim

To provide students with an opportunity to **interlink subjects**, develop a **research-based understanding**, and present their learnings through **visual, creative, and interactive formats** in a **Gallery-style walkthrough experience** for peers, teachers, and visitors.

NOTE: As per CBSE instructions the participation of each student is mandatory.

Subject Integration Topics:

- **History:** *The Making of a Global World (Subtopics 2 to 4.4)*
- **Geography:** *Lifelines of National Economy*
- **Economics:** *Globalization and the Indian Economy (Subtopics: Production across the countries, Chinese toys in India, World Trade Organization, The struggle for fair Globalization).*

Topics for Display (Roll No. Based)

Roll Numbers	Assigned Theme
1 – 6	 <i>Impact of World War II on the Global Economy</i>
7 – 12	<i>India's Economic Condition During the Great Depression</i>
13 – 18	 <i>Post-War Recovery: Rebuilding the Global Economy</i>
19 – 24	 <i>Role of Roadways, Railways, Waterways & Airways in building National Economy</i>
25 – 30	 <i>World Trade Organization (WTO) & its role in promoting fair trade practices</i>
31 – 36	 <i>How Waterways & Airways Fuel Globalization</i>
37 – 42	 <i>Challenges Faced by India in Globalization</i>
43 onwards	 <i>Major Ports of India & Their Role in Trade (Include Map Marking)</i>

Presentation Format (Choose Any One or Combine Creatively)

Students can showcase their work using any of the following:

- Charts
- Informative Brochures
- Visual Collage or Posters
- Comic Strips or Illustrated Storyboards
- 3D Models (like a ship, port, airplane, or globe)
- Flowcharts
- Map marking
- “Then & Now” Comparative Timeline Panel

PUNJABI

● ਨੈਤਿਕ ਮੁੱਲਾਂ 'ਤੇ ਅਧਾਰਿਤ ਕੋਈ ਇਕ ਲਘੂ-ਕਹਾਣੀ ਜਾਂ ਕਵਿਤਾ ਜੋ ਤੁਹਾਡੀ ਸਵੈ-ਰਚਿਤ (self created) ਹੋਵੇ, ਵਧੀਆ ਢੰਗ ਤੇ ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਆਪਣੀ ਕਾਪੀ ਵਿੱਚ ਲਿਖੋ।

● “ਕਿਸ਼ੋਰਾਂ ਵਿੱਚ ਮਾਨਸਿਕ ਸਿਹਤ ਦੀ ਮਹੱਤਤਾ” ਵਿਸ਼ੇ 'ਤੇ 3-4 ਮਿੰਟ ਦਾ ਭਾਸ਼ਣ ਤਿਆਰ ਕਰਨਾ।

● ਪ੍ਰੋਜੈਕਟ (Project Work)

ਪੰਜਾਬ ਦੇ ਕਿਸੇ ਇੱਕ ਸੱਭਿਆਚਾਰਕ ਪਹਿਲੂ (ਜਿਵੇਂ ਲੋਕ ਨਾਚ, ਪੰਜਾਬੀ ਖਾਣੇ, ਤਿਉਹਾਰ, ਜਾਂ ਪਰੰਪਰਾਗਤ ਪਹਿਰਾਵੇ) 'ਤੇ ਇੱਕ ਪ੍ਰੋਜੈਕਟ ਤਿਆਰ ਕਰੋ।

ਨੋਟ:

● A4 ਸਾਈਜ਼ ਸ਼ੀਟ 'ਤੇ ਪੋਸਟਰ ਬਣਾਓ ਜਾਂ ਕੋਲਾਜ਼ ਬਣਾਓ:

● ਚਿੱਤਰ, ਫੋਟੋ, ਜਾਂ ਚਾਰਟ ਸ਼ਾਮਲ ਕਰੋ।

ARTIFICIAL INTELLIGENCE

Assignment 1: AI in Daily Life

Objective: To observe and understand how AI is integrated into everyday life.

Instructions:

- List **10 real-life examples** where AI is used (e.g., Alexa, Google Maps, Netflix).
- For each example, answer the following:
 - What is the AI application?
 - How does it help?
 - What type of AI domain does it belong to (NLP, CV, DS)?
- Include pictures (optional but recommended).

Assignment 2: Cyber Safety Rules PPT

Objective: Promote cyber safety awareness.

Instructions:

- Create a **PPT (7-8 slides)** on the topic:

 “Cyber Safety Rules for Students”
- Include **at least 5 safety rules** such as:
 - Never share passwords.
 - Use strong passwords.
 - Don't talk to strangers online.
 - Don't download unknown files.
 - Report cyberbullying.

Assignment 3: Create an AI Ethics Poster(digital)

Objective: Learn about ethical concerns in AI.

Task:

- Create a digital poster on "**Ethics in AI**".
- Topics to include: privacy, bias, job displacement.
- Use slogans or artwork to convey your message.

Note: the H.W is to be submitted in a folder as part of the practical file