

APEX PUBLIC SCHOOL
CLASS VIII
HOLIDAY HOMEWORK (2026-27)

ENGLISH

1. Creative Writing: Imagine you found a mysterious object during your vacation. Write a short story about it.
2. Grammar Task : Write 10 sentences using different tenses (present, past, and future).
3. Project: Research any one festival celebrated in India and write a short note on its importance and traditions.

SOCIAL SCIENCE

GENERAL INSTRUCTIONS

- ✓ Complete all work neatly and creatively.
- ✓ Use eco-friendly materials wherever possible.
- ✓ Students may use pictures, drawings, maps and sketches.

PART – A Great Heroes of India

Choose ANY ONE Activity

ACTIVITY 1 – Reading & Writing

Read about ANY ONE personality:

- * Chhatrapati Shivaji Maharaj
- * Maharana Pratap
- * Guru Gobind Singh
- * Rani Lakshmi Bai
- * Swami Vivekananda
- * A. P. J. Abdul Kalam

- * Aryabhata
- * Krishnadevaraya
- * Lachit Borphukan
- * Ahilyabai Holkar
- * Chandragupta Maurya
- * Samudragupta
- * Subhash Chandra Bose
- * Sardar Vallabhbhai Patel
- * Savitribai Phule

Write about the personality in about **2 pages** .Include:

- ✓ Early life
- ✓ Achievements
- ✓ Leadership qualities
- ✓ Contribution to India
- ✓ What inspires you most

OR

ACTIVITY 2 – Storytelling

Prepare a **2–3 minute storytelling presentation** on ANY ONE personality.

Suggested Themes:

- * Shivaji Maharaj and Swaraj
- * Maharana Pratap and Haldighati
- * Guru Gobind Singh Ji's courage
- * Contribution of Krishnadevaraya
- * Aryabhata and Ancient Indian Science
- * Vivekananda's message to youth

PART – B Timeline Activity

Prepare a colourful timeline on:

“Journey of Indian Civilization & Empires”

Include:

- * Indus Valley Civilization
- * Mauryan Empire
- * Gupta Age
- * Chola Empire
- * Vijayanagar Empire
- * Maratha Empire
- * 1857 Revolt

Decorate with sketches, maps and symbols.

PART – C Theme: Indian Heritage, Heroes & Civilization

Students may prepare *ANY ONE* of the following:

1. Working Model

Examples:

- * Harappan drainage system
- * Rainwater harvesting
- * Parliament functioning
- * Step-well water system

OR

2. 3D Model

Examples:

- * Maratha fort
- * Ancient Gurukul
- * Vijayanagar marketplace

* Sustainable Indian village

OR

3. Poster Making

Themes:

* Great Indian Kings

* Save Water

* Unity in Diversity

* Ancient Indian Science

OR

4. Infographic

Topics:

* Indian Civilization Timeline

* Contributions of Aryabhatta

* Indian Democracy

* Heritage Sites of India

OR

5. Scrapbook / Heritage Journal

Include:

* Heroes of India

* Festivals and Culture

* Ancient Inventions

* Indian Architecture

OR

6. PPT / Digital Presentation

* Indian Culture

* Ancient Education System

* Democracy in India

* Great Rulers of India

OR

7. Board Game / Quiz Activity

Examples:

* Heritage Treasure Hunt

* Indian History Quiz

* Map Puzzle

* Civilization Board Game

SCIENCE

Microorganisms impact the environment and play a vital role in various aspects of life, from decomposition and nutrient cycling to disease transmission and bioremediation. However, some microorganisms can be harmful, causing diseases and environmental damage.

- **Create a comic strip that illustrates the dual role of microorganisms**—depict beneficial microorganisms like those used in composting or food fermentation, alongside harmful ones such as pathogens causing diseases or contributing to pollution. Show how human activities can influence microbial communities and emphasize the importance of microbial balance for environmental health.

World Environment Day is approaching on June 5, 2024. Mission LiFE- Lifestyle for environment is an India-led global movement by the Government of India and Ministry of environment which inspires people to take actions to protect and preserve the environment. All students will open this link <http://missionlife-moefcc.nic.in/> and go through the information regarding Mission LiFE as well as the

- The theme for World Environment Day is: (i) Save Energy, (ii) Save Water, (iii) Say No to Single Use Plastic, (iv) Adopt Sustainable Food Systems, (v) Adopt healthy Lifestyles, (vi) Reduce E-Waste (vii) Reduce Waste have been identified to mobilise the movement.
- Choose any one theme from above and write any 5 important Lifestyle changes which you can incorporate in your life to protect and preserve the environment on an A4 size sheet.
- ***Mini Science Documentary***
- What to do: Pick a topic(any one) -Mobile phone screen vs human health screen. - Working of any kitchen appliances. -Ways to conserve water at home. -Healthy

habits for adolescents. Research it and create a 3-5 minute video explaining it in your own words using drawings, props, or animation apps.

• **CREATE A SCIENCE DICTIONARY USING KEYWORDS OF CHAPTERS IN YOUR BOOK**

- Be the Food inspector
- How to do: Find out methods to detect the food adulteration in the food samples Given below. The method should include less or no chemical. Write the method in your science Project file. Perform the experiment under the supervision of your parent and click your picture for evidence. You can also make video of your own and send to:

Roll no.

1-10 Green peas and green chillies

11-20 Honey and Milk

21-30 Coffee and red chilli powder

31-40 Black pepper and Salt 41 onwards Ghee and tea leaves

- Where to do: Science Project File. Paste photographs as evidence.
- Parameters: Authenticity, research, presentation accuracy

HINDI

1. अपने घर की किसी दीवार/चार्ट पर रंगीन पर्चियों से हिंदी के नए शब्द चिपकाइए।

प्रतिदिन 2 नए शब्द लिखें।

उनके अर्थ भी लिखें।

महीने के अंत में कम से कम 20 शब्द होने चाहिए।

2. घर या आसपास की किसी सुंदर तस्वीर को काँपी में चिपकाइए।

उस तस्वीर को देखकर 8-10 पंक्तियों की कल्पनात्मक कहानी लिखिए।

3. अपने दादा-दादी/नाना-नानी से उनके बचपन के बारे में बातचीत कीजिए।

पूछिए—

उनके समय के खेल

स्कूल जीवन

छुट्टियाँ कैसे बिताते थे

फिर उस बातचीत को प्रश्न - उत्तर रूप में लिखिए।

4. घर में एक पौधा लगाइए। 15 दिनों तक उसका ध्यान रखिए और एक छोटी डायरी बनाइए—

*पौधे का नाम

*रोज़ का परिवर्तन

*पानी कब दिया

*अंत में पौधे के साथ फोटो या चित्र लगाइए।

5. A4 शीट पर अपना छोटा हिंदी अखबार बनाइए। उसमें शामिल करें—

*2 समाचार

*मौसम की जानकारी

*एक चुटकुला

*एक कविता

*एक विज्ञापन

6. किसी 5 मुहावरों का चयन करें और उनका चित्र बनाकर अर्थ लिखें।

जैसे—

नौ दो ग्यारह होना

आसमान सिर पर उठाना

7. अलग-अलग शब्द चुनिए।

उदाहरण: पेड़, बारिश, बच्चा, किताब, पक्षी

इन सभी शब्दों का प्रयोग करके मजेदार कहानी लिखिए।

8. अपनी पसंद की एक हिंदी कविता लिखिए और उसे बॉर्डर, चित्र और रंगों से सजाइए।

☆ विशेष निर्देश:-

*सभी कार्य स्वयं करें।

*रंगों और चित्रों का प्रयोग करें।

*साफ-सुथरी लिखावट रखें।

* गृहकार्य के लिए अलग कॉपी बनाएँ

*रचनात्मकता को प्राथमिकता दें।

SANSKRIT

1. रचनात्मक एवं कलात्मक कार्य (Creative Activities)

चित्र-वर्णनम्: अपनी पसंद के किसी भी पांच चित्रों (जैसे- विद्यालय, उद्यान, या परिवार) को स्ट्रैपबुक में चिपकाएँ और प्रत्येक चित्र पर संस्कृत में 5-5 वाक्य लिखें।

संस्कृत-भित्तिपत्रिका (Sanskrit Poster): 'पर्यावरण-संरक्षणम्' या 'योग: स्वास्थ्य आधारः' विषय पर एक सुंदर चार्ट तैयार करें और उससे संबंधित 2 श्लोक अर्थ सहित लिखें।

वंश-वृक्ष (Family Tree): अपनी स्क्रेपबुक में एक बड़ा सा पेड़ बनाएँ और उस पर परिवार के सदस्यों के चित्र चिपकाकर उनके नीचे संस्कृत में उनके संबंध लिखें (जैसे- पितामहः, मातामही, भ्राता, भगिनी आदि)।

ART

1. Terracotta Plate (Do Madhubani, Warli and Folk Art on plate)



- Materials to be used-
 - Thermocol Plate (12x12 inch)
 - Fabric Colours (brown and white colour)
 - Brush

COMPUTER SCIENCE AND AI

1) Complete AI worksheets in the computer science notebook itself along with class work which was done in the class.

Worksheet 1: Introduction to AI

1. MCQ: What is Artificial Intelligence?

(a) Human intelligence (b) Machine intelligence (c) Animal intelligence (d) Natural science

2. True/False: AI systems can learn from data.

3. Fill in the blank: AI can recognise _____ and make decisions.

4. One-line: Name one example of AI in daily life.

5. MCQ: AI systems improve over _____.

(a) Time (b) Sleep (c) Rest (d) Luck

6. True/False: AI only works without data.

7. Fill in the blank: Voice assistants use massive _____.

8. One-line: How does AI mimic humans?

9. Match: AI → _____

10. Short Answer: Why is data important for AI?

Worksheet 2: AI Project Cycle Basics

1. MCQ: The AI Project Cycle is a _____ process.

(a) random (b) cyclical (c) useless (d) one-time

2. True/False: AI development needs proper organisation.

3. Fill in the blank: The first step is Define the _____.

4. One-line: Why is the AI Project Cycle important?

5. MCQ: Which stage collects data?

(a) Deployment (b) Data Collection (c) Monitoring (d) None

6. True/False: AI projects do not need ethical practices.

7. Fill in the blank: Structured steps save _____.

8. One-line: What does iteration mean?

9. Write 2 AI applications.

10. Short Answer: List any three stages of AI Project Cycle.

Worksheet 3: Data Collection & Training

1. MCQ: Most AI project time is spent on:
(a) Games (b) Data Preparation (c) Sleep (d) Deployment
2. True/False: Bad data leads to poor AI.
3. Fill in the blank: Missing values should be _____.
4. One-line: What is model training?
5. MCQ: Which algorithm can be used?
(a) Tree (b) Decision Tree (c) Notebook (d) Keyboard
6. True/False: AI models learn patterns from data.
7. Fill in the blank: New unseen data is used for _____.
8. One-line: What is model evaluation?
9. One-line: How AI is trained?
10. Short Answer: Why is data cleaning important?

2) Future Robot Helper

Make one poster using Canva on the topic "Future Robot Helper".

3) Make a beautiful chart paper (use your creative skills, pictures, quotes, etc) according to your roll numbers:

- Roll no. 1-10: Different types of Apps
- Roll no. 11-20: HTML Basics
- Roll no. 21-30: Python Basics
- Roll no. 31-Till Last: Humans Intelligence vs Artificial Intelligence

LIBRARY

As part of your holiday homework, you have to create a Book Cover of any Ruskin Bond book of your choice. 🧐📖

You may use:

- ✂️ A4 size drawing sheets or smaller sheets
- ✂️ Colours / Sketch pens
- ✂️ Creative designs & illustrations

Make your book cover as attractive and creative as possible.

Special Announcement:

The Best Book Covers will be awarded with Certificates for their creativity and presentation.

Important Instructions:

- Write your Name and Class clearly on the back side of the book cover.

We are excited to see your creativity and love for books!



MATHEMATICS

Activity/Model Work (According to Roll Numbers)

Roll No. 1 to 13

Model of a Square Garden

Prepare a model of a square garden using cardboard or any suitable material.

You may decorate it with:

Greenery and plants

Swings

Exercise machines

Pathways

Benches

Fountains, lights, etc.

Make your garden colorful and attractive.

Roll No. 14 to 26

Creative Chess Board with 32 Pieces

Prepare a chess board and all 32 chess pieces using clay or any other material.

Include:

King

Queen

Bishops

Knights (horses)

Rooks

Pawns

Show your creativity and design it differently from a regular chess board.

Roll No. 27 Onwards

Squares/ Perfect Squares Tower

Prepare a creative model of squares or perfect squares tower using cardboard, paper, clay, thermocol, or any suitable material.

The following Work is for ALL Students

1. Vedic Maths Scrap File

Prepare a scrap file showing and explaining 10 Vedic Maths tricks with examples.

2. Sudoku Activity

Prepare two Sudoku puzzles beautifully and also solve them in the same scrap file.

3. Worksheets

Solve the given worksheets in a separate notebook neatly.

MIDDLE SECTION – DEPARTMENT OF MATHEMATICS

NAME OF THE STUDENT:

CLASS :8 SEC: ROLL NO:

DATE :

TOPIC: RATIONAL NUMBERS

WORKSHEET NUMBER:

S.NO	QUESTIONS
1	Write the additive inverse of $\left(\frac{5}{6} + \frac{-4}{21}\right)$
2	Write the multiplicative inverse of the sum of $\frac{-8}{15}$ and $\frac{2}{-3}$.
3	Find the product of $\frac{3}{8}$ and the additive inverse of $\frac{4}{15}$.
4	Show $\left(\frac{1}{4} - \frac{3}{2}\right)$ on the number line.
5	Write four rational numbers between $\frac{-1}{2}$ and $\frac{1}{3}$
6	By what number should $\frac{-33}{16}$ be divided to get $\frac{-11}{4}$?
7	What should be subtracted from $\left(\frac{3}{4} - \frac{2}{3}\right)$ to get $\frac{-1}{6}$?
8	Simplify: a) $\left(\frac{-4}{3} \times \frac{12}{-5}\right) + \left(\frac{3}{7} \times \frac{21}{15}\right)$, b) $\frac{-1}{2} \left(\frac{-3}{5} - \frac{1}{10}\right)$, c) $\left(\frac{-2}{9} \div \frac{4}{9}\right) + \left(\frac{7}{6} \times \frac{-6}{21}\right)$, d) $\left(\frac{3}{-5} + \frac{1}{10}\right) - \left(\frac{-4}{15} \div \frac{8}{-25}\right)$ e) $\left(\frac{3}{2} \times \frac{-7}{20}\right) - \left(\frac{9}{4} \div \frac{3}{16}\right) + 10$
9	Simplify by using suitable property: i) $\left(\frac{-5}{7} \times \frac{4}{-5}\right) + \left(\frac{4}{7} \times \frac{4}{5}\right) - \frac{-1}{2}$ ii) $\left(\frac{-5}{2} \times \frac{3}{4}\right) - \left(\frac{5}{2}\right) \times \frac{-7}{6}$ iii) $\frac{3}{8} \times \frac{-2}{5} + \frac{-3}{8} + \frac{3}{8} \times \frac{3}{10}$ iv) $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{7} - \frac{3}{7} \times \frac{3}{5}$ v) $\left(\frac{8}{11} \times \frac{3}{7}\right) - \left(\frac{-4}{7} \times \frac{8}{11}\right) + \frac{8}{11}$ vi) $\left(\frac{4}{9} \times \frac{1}{5}\right) - \left(\frac{3}{5} \times \frac{4}{9}\right) + \left(\frac{3}{10} \times \frac{4}{9}\right) - \left(\frac{7}{5} \times \frac{4}{9}\right)$
10	The product of two rational numbers is $\frac{-14}{9}$. If one of them is $\frac{-5}{18}$, find the other number.
11	What should be added to $\left(\frac{-4}{15}\right)$ to get additive inverse of $\left(\frac{-1}{5} + \frac{4}{3}\right)$?
12	What should be multiplied with $\left(\frac{-5}{9} - \frac{7}{18}\right)$ to get $\left(\frac{3}{8} - \frac{-1}{4}\right)$?
13	What should be added to $\left(\frac{-5}{8}\right)$ get multiplicative inverse of $\left(\frac{1}{7} \div \frac{-2}{21}\right)$?
14	What should be subtracted from $\left(\frac{-4}{9} \times \frac{-3}{8}\right)$ to get additive inverse of $\left(\frac{-5}{-4}\right)$?

CLASS : VIII

MATHEMATICS

SQUARES AND SQUARE ROOTS

1. Find the square root of 6400
2. Is 90 a perfect square
3. Is 2352 a perfect square? If not find the smallest multiple of 2352 which is a perfect square. Find the square root of the new number.
4. Find the smallest number by which 9408 must be divided so that the quotient is a perfect square. Find the square root of the quotient.
5. Without doing any calculation, find the numbers which are surely not perfect square.
i.) 153 ii.) 257 iii.) 408 iv.) 441
6. Find the square root of the following numbers by the prime factorisation method.
i.) 400 ii.) 9604 iii.) 8100 iv.) 1764 v.) 5929 vi.) 9216
7. For each of the following numbers, find the smallest whole number by which it should be multiplied so as to get a perfect square. also find the square root of the square number so obtained.
i.) 252 ii.) 2925 iii.) 396 iv.) 2028 v.) 1458 vi.) 768
8. For each of the following number, find the smallest whole number by which it should be divided so as to get a perfect square. Also find the square root of the square number so obtained.
i.) 252 ii.) 180 iii.) 1008 iv.) 2028 v.) 1458 vi.) 768
9. The students of class viii of a school donated Rs 2401 in all, for prime minister's national relief fund. each student donated as many rupees as the no: of students in the class. Find the no: of students in the class.
10. 2118 plants are to be planted in a garden in such a way that each row contains as many plants as the no: of rows. Find the no: of rows and the no: of plants in each row.