



# Summer Holiday Homework



## 1. Projects and Models (Choose One)

\* **Soil Conservation Model:** Create a model showcasing methods of soil conservation (e.g., terracing, windbreaks).

\* **Ecosystem Portfolio:** Research a specific ecosystem (desert, rainforest, or coral reef) and create a detailed poster highlighting its flora, fauna, and environmental threats.

\* **Simple Machine Toolkit:** Identify five simple machines in your house (lever, pulley, inclined plane) and sketch or build models demonstrating how they work.



Lever



Pulley



Inclined Plane

## 2. Experiments and Observation

\* **Germination Study:** Grow bean sprouts in a clear jar with wet cotton, documenting the growth stages, root development, and leaf appearance over 10 days.



Day 1



Day 3



Day 5



Day 7



Day 10

\* **Surface Tension Magic:** Experiment with paper clips on water to study surface tension.



\* **Composting Activity:** Create a small-scale compost pit in a corner of your garden using kitchen waste, and observe the decomposition process over the holidays.



## 3. Creative & Research Activities

\* **Scientific Dictionary:** Create a dictionary of 50 new scientific terms with meanings from 2nd and 7th chapters of your textbook.



Example Terms:

- Photosynthesis
- Ecosystem
- Microorganism

\* **Microbe Disease Report:** Create a report on diseases caused by microbes (e.g., malaria, typhoid), including the microbe name, transmission method, symptoms, and prevention.

\* **Food Preservation Poster:** Prepare a decorative and attractive poster on modern and traditional methods of food preservation.

### FOOD PRESERVATION

Preserve Today, Healthy Tomorrow!

**TRADITIONAL METHODS**

- Sun Drying
- Salting
- Pickling
- Fermentation

**MODERN METHODS**

- Refrigeration
- Freezing
- Canning
- Dehydration

♥ Food is precious, don't waste it! ♥

## 4. Daily Life Science

\* **Household Material Classifying:** List 20 objects at home and classify them by physical properties: Lustrous vs. Dull, Hard vs. Soft, Soluble vs. Insoluble in water.

Example					
Lustrous (Shiny)	Dull (Not Shiny)	Hard	Soft	Soluble in Water	Insoluble in Water
Steel Spoon	Wooden Bowl	...	...	...	...

\* **Diet Chart Design:** Based on discussions with family, design a balanced diet plan for teenagers to maintain healthy immunity.

Eat Healthy Stay Healthy! ♥

Carbohydrates (Energy) →  
Proteins (Growth) →



Vitamins & Minerals (Protection)



Water (Hydration)

### General Guidelines:

- \* **Documentation:** Maintain an A4 folder or a separate thin notebook for all activities.
- \* **Visuals:** Use pictures, drawings, and diagrams to make your work attractive.
- \* **Revision:** Revise the chapters covered in school before the holidays.



# Holiday Assignment

## Mathematics

Class - 8 (CBSE)

Learn  
Practice  
Succeed

- Instructions:**
1. Do all the questions in your Maths notebook.
  2. Show all steps neatly.
  3. Use pencil for diagrams and graphs.
  4. Revise formulas and tables regularly.

### \* PART 1 : SYLLABUS PRACTICE WORK \*

#### Chapter 1 : Rational Numbers

1. Find five rational numbers between  $-\frac{2}{5}$  and  $\frac{1}{2}$ .
2. Verify the property  $a \times (b+c) = (a \times b) + (a \times c)$  for  $a = -\frac{2}{3}$ ,  $b = \frac{5}{6}$  and  $c = -\frac{1}{2}$ .
3. Write the additive inverse and multiplicative inverse of  $-\frac{13}{19}$  and  $\frac{2}{-9}$ .



#### Chapter 2 : Linear Equations in One Variable

1. Solve for  $x$  :  $\frac{x+1}{2x+3} = \frac{3}{8}$
2. Solve for  $y$  :  $0.25(4y-3) = 0.05(10y-9)$
3. The present age of Sahil's mother is three times the present age of Sahil. After 5 years their ages will add to 66 years. Find their present ages.



#### Chapter 5 : Squares and Square Roots

1. Find the smallest square number that is divisible by each of the numbers 4, 9 and 10.
2. Find the square root of 7921 using the long division method.
3. Find the least number that must be subtracted from 4000 so as to get a perfect square.



### \* PART 2 : PRACTICAL MATHEMATICS PROJECTS \*

Choose one of the following activities to present on an A4 sheet or chart paper.

#### Option A : Budgeting & Data Handling

- Track your family's weekly grocery expenses.
- Create a data table showing costs for Vegetables, Fruits, Dairy and Staples.
- Represent this data using a neat Pie Chart and a Bar Graph.
- Calculate the percentage spent on each category.



#### Option B : Architectural Tessellations

- Research how regular polygons tile a flat surface without gaps.
- Cut out shapes (squares, equilateral triangles, or regular hexagons) from coloured paper.
- Create a geometric tiling pattern on a chart.
- Write down the measure of the interior angles of your chosen shapes. Explain why they fit together perfectly.

### \* PART 3 : MENTAL MATHS & BRAIN TEASERS \*

1. **The Number Riddle** : I am a two-digit perfect square number. If you reverse my digits, I am still a perfect square number. What number am I?
2. **The Magic Square** : Create a  $3 \times 3$  grid using numbers from 1 to 9 exactly once. Ensure every row, column and diagonal adds up to exactly 15.



8	1	6
3	5	7
4	9	2

Practice Today... Success Tomorrow!



# COMPUTER



## Covered

- Computer Network
- Exploring the Power of Photoshop CC
- MS-Access: Introduction
- MS-Access Query, Forms and Reports
- HTML Lists and Tables
- HTML Image, Links and Frames

## Instructions

- Complete all work neatly in a separate notebook/file.
- Draw diagrams with colors wherever required.
- Use screenshots for practical work.
- Submit homework after summer vacation.
- Prepare practical files on the computer wherever possible.

## Week 1: Computer Network + Photoshop CC

- Day 1:** Define computer network. Write advantages and disadvantages of networking. Draw and label LAN, MAN, WAN.
- Day 2:** Make a chart showing types, uses and examples of networks.
- Day 3:** Difference between Internet and Intranet. Explain Bus and Star topology.
- Day 4:** Explain Photoshop toolbox, layers, menu bar and status bar.
- Day 5:** Create passport size photo editing and name posters.
- Day 6:** Design a birthday card or school admission poster.
- Day 7:** Write notes on Router, Switch, Hub and Photoshop tools.

## Week 2: MS-Access Introduction

- Day 8:** Define Database and DBMS.
- Day 9:** Create a table with Roll No, Name, Class and Marks.
- Day 10:** Create a student database with 10 records.
- Day 11:** Difference between Field and Record. What is the Primary Key?
- Day 12:** Prepare School Library Database project.
- Day 13:** Write viva questions and answers.
- Day 14:** Prepare 20 MCQs from Chapter 3.

## Week 3: Query, Forms and Reports

- Day 15:** Define Query and its types.
- Day 16:** Create queries for students scoring above 80.
- Day 17:** Explain Forms and their advantages.
- Day 18:** Explain Reports and difference between Form and Report.
- Day 19:** Create one Form and one Report.
- Day 20:** Prepare flowchart for Database process.
- Day 21:** Revision worksheet questions.

## Week 4: HTML

- Day 22:** What is HTML? Write basic HTML programs.
- Day 23:** Create ordered, unordered and definition lists.
- Day 24:** Create a student marks table using HTML.
- Day 25:** Design timetable webpage.
- Day 26:** Insert image and hyperlink in the webpage.
- Day 27:** Define Frames and create frame webpage.
- Day 28:** Create a 3-page website on My School.
- Day 29:** Design webpage on Save Environment.
- Day 30:** Prepare MCQs, short and long questions from all chapters.

## Project Work

Prepare one practical file including:-

- Photoshop designs
- MS-Access screenshots
- HTML codes
- Webpage outputs



# हिंदी

1. अपना परिचय लिखें।
2. अवकाश हेतु प्रधानाचार्य को प्रार्थना-पत्र लिखो।
3. अपनी दिनचर्या के बारे में 10 वाक्य लिखिए।
4. पानी की बचत क्यों आवश्यक है, इस विषय पर अपने विचार व्यक्त कीजिए।
5. कोई एक स्वरचित कहानी या कविता लिखिए।
6. भारत के सभी राष्ट्रीय चिन्हों व उनके कार्यों का एक सुंदर चार्ट बनाकर परियोजना तैयार कीजिए।
7. आपके विचार से एक अच्छे विद्यालय में क्या-क्या होना चाहिए? 50-60 शब्दों में तर्कपूर्ण उत्तर दीजिए।



# ENGLISH

1. Write 20 cursive writing practice pages in cursive handwriting.
2. Search out bilingual meanings of all vocabulary words from Chapter 4 to Chapter 20 and write them in the book also.
3. Revise Chapter 1 to Chapter 5.

## Grammar

1. Make a file on Parts of Speech with definitions and examples.
2. Write notices on the given topics:
  - a) Science Exhibition
  - b) Tree Plantation Drive
  - c) Drawing Competition
3. Write essays on the given topics:
  - a) A Visit to a Hill Station
  - b) My Favourite Hobby
  - c) My School Library



# SST

## Map Work

1. Label and locate states with capitals on the Indian map and paste in your holiday homework copy.



## Writing Work

1. What are resources? What are the different types of resources? Describe them.
2. Write Fundamental Rights with Articles.

★ Paste all Prime Ministers and Presidents' photos of our country in your holiday homework copy.

3. Define the terms:
  - a) Constitution
  - b) Law
  - c) Fundamental Rights
  - d) Make a timeline showing important events of Indian history.



## Chart Work

1. Make a chart of the Preamble of the Indian Constitution.

OR

Make a chart of "Types of Resources" (with pictures/examples).



## Project Work

(Make a 20-page file)

1. British Expansion in India
  - ★ Introduction
  - ★ Important Battles
  - ★ Policies used by the British
  - ★ Conclusion (Your Opinion)
  - ★ Add Pictures/Maps





# CBSE

## Class - 8

# Art Education



Art is a wonderful way to express our thoughts, feelings and ideas. Let's learn, create and make our world more beautiful.

### 1. Art-Integrated Project (CBSE Mandatory)

- CBSE pairs states together for cultural exchange.
- Create artwork based on your school's assigned paired state.
  - > Folk Art Painting : Research and draw a traditional folk art pattern from your paired state (e.g., Madhubani, Warli, Gond or Thangka painting).
  - > Monuments & Culture : Draw a famous historical monument or a festival scene celebrating the paired state's culture.



### 2. Nature & Scenery (Skill Development)

- Draw a village landscape showcasing summer elements.
- Include thatched huts, mango trees laden with fruits, a water body, and a person walking with an umbrella or hand fan.
- Medium to Use : Use oil pastels or watercolors to practice color blending and shading techniques required for Class 8.



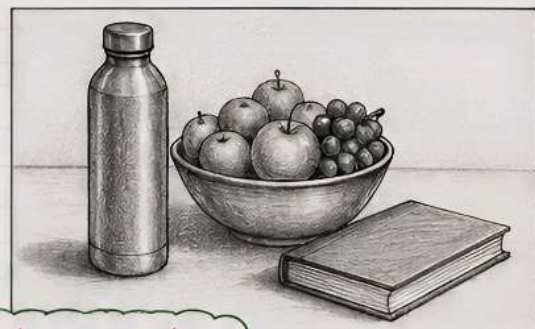
### 3. Awareness Posters (Social & Environmental Themes)

- Save Environment / Save Water : Design a poster with a strong visual message. A popular concept is a split-earth design, showing a green, lush half versus a polluted, dry half.
- Digital India / Swachh Bharat : Create a poster illustrating clean surroundings or India's digital growth. Include a bold, punchy slogan.



### 4. Still Life & Sketching (Technical Practice)

- Arrange 3-4 daily objects (e.g., a water bottle, a bowl of fruits, and a book) on a table.
- Technique : Draw them using standard 2B, 4B, and 6B shading pencils to master light, shadow, and proportion.



"Every drawing you make is a step towards becoming a better artist."