

SARASWATI WORLD SCHOOL
SESSION 2026-27
HOLIDAYS' HOMEWORK
CLASS 10



INFORMATION TECHNOLOGY

1. Draw or create a poster showing:

Roll No.

1–10 → Cyber Safety Awareness

11–20 → Computer Ethics

21–30 → Smart Classroom with Technology

31–40 → Evolution of Computers

41–So On→ Uses of Artificial Intelligence

2. Read Chapter -3,4 from book and try to highlight notes

3. Learning Task

Learn A to Z shortcut keys.

Learn full forms of:

Computer

Mouse

Keyboard

Monitor

CPU

Learn the working process of CPU.

ART AND CRAFT

Make a beautiful scenery or painting based on any upcoming festival on a2 size hard sheet

ENGLISH

Q1-Write an essay on “Importance of Time Management for Students” in about 250 words.

Q2-Read the poem The tiger in the zoo and explain its central idea and message in simple words.

Q3-Write a character sketch of Nelson Mandela based on the lesson Nelson Mandela: Long Walk to Freedom.

Q:4-Prepare a diary entry describing your most memorable day during the summer holidays.

Q:5-Make a project on any one famous English poet such as William Wordsworth or John Keats including:

Biography

Important works

Themes of poetry

Contribution to English literature

SCIENCE

Part 1: Chemical Reactions and Equations

I. Theoretical & Conceptual Tasks

- 1. Balancing Equations: Explain why we balance chemical equations. Balance the following:
 - $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + \text{H}_2$
 - $\text{HNO}_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2\text{O}$
- 2. Types of Reactions: Define and give one unique example for each:
 - Combination Reaction
 - Decomposition Reaction (Thermal, Electrolytic, and Photolytic)
 - Displacement & Double Displacement
 - Redox Reaction (Identify the oxidizing and reducing agents)

II. Practical Application (Home Activity)

- Corrosion Observation: Observe three iron nails (Dry, Wet, Oiled) for 5 days. Record changes and write a report on how oiling prevents corrosion.
- The Litmus Test: Use natural indicators (Turmeric/Red Cabbage) with Vinegar (Acid) and Baking Soda (Base). Record the color changes.

Part 2: Electricity

I. Circuit Diagrams & Definitions

- 1. The Blueprint: Draw a circuit diagram containing a battery of three cells, a plug key, an ammeter, a resistor of 5Ω in series with a parallel combination of two 10Ω resistors, and a voltmeter.
- 2. Ohm's Law: State the law and describe the V-I graph. What does the slope represent?

II. Numerical Challenges

- 1. Resistance Calculation: A wire of resistance R is cut into five equal parts. These parts are then connected in parallel. If the equivalent resistance is R' , find the ratio R/R' .
- 2. Heating Effect: An electric iron consumes $840W$ (max) and $360W$ (min) at $220V$. Calculate the current and resistance for both cases.

Part 3: Investigative Project (Choose One)

- Option A: "Hydrogen as a Fuel" - Create a report on the chemical reaction of hydrogen combustion and its benefits as a clean energy source.
- Option B: "Safety First" - Research your home's fuse box/MCB. Explain Joule's Heating Effect and the importance of Earthing.

HOME SCIENCE

पाठ 1, 6, 11 और 13, 16 से संबंधित प्रोजेक्ट फाइल बनानी है

पाठ 2, 7 और 15 पढ़ें और उनके प्रश्न उत्तर याद करें

तुरपाई करना काज बनाना सिंपल सिलाई का अभ्यास करें

गृह विज्ञान अवकाश कार्य

MATHEMATICS (UP BOARD)

Session: 2026–27

Chapter-wise Practice

1. Real Numbers

Solve:

- 10 questions based on HCF and LCM
- 5 questions based on irrational numbers

2. Polynomials

Solve:

- 10 questions on finding zeroes of polynomials
- 5 questions on relationship between zeroes and coefficients
- 5 graph-based questions

3. Introduction to Trigonometry

Learn all trigonometric ratios and identities.

Practice:

- Standard values table
- 10 questions based on trigonometric ratios
- 10 questions based on identities

Formula Work

Prepare a separate formula sheet for:

- Real Numbers
- Polynomials
- Trigonometry

Activity

Draw and learn the trigonometric ratios table from zero degree to 90 degrees.

SARASWATI WORLD SCHOOL

HOLIDAY HOMEWORK (ग्रीष्मकालीन गृहकार्य)

Class 10 | Science (विज्ञान) | UP Board Curriculum

Chapters: Chemical Reactions & Equations | Life Processes

Section A: Chemical Reactions & Equations (रासायनिक अभिक्रियाएं)

1. Compound Masterlist (यौगिक सूची)

Prepare a table of 20 common chemical compounds. Your table must include:

Common Name (साधारण नाम)	Chemical Name (रासायनिक नाम)	Formula (सूत्र)
Baking Soda	Sodium Hydrogen Carbonate	$NaHCO_3$
Bleaching Powder	Calcium Oxychloride	$CaOCl_2$
Plaster of Paris	Calcium Sulphate Hemihydrate	$CaSO_4 \cdot \frac{1}{2}H_2O$
Quick Lime	Calcium Oxide	CaO

2. Equation Practice (समीकरण अभ्यास)

Balance the following equations and identify the type of reaction:

- $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$
- $Pb(NO_3)_2 \rightarrow PbO + NO_2 + O_2$
- $BaCl_2 + Al_2(SO_4)_3 \rightarrow BaSO_4 + AlCl_3$
- $Mg + O_2 \rightarrow MgO$

3. Short Notes

Explain **Corrosion** (संक्षारण) and **Rancidity** (विकृतगंधिता) with two preventive measures for each.

Section B: Life Processes (जैव प्रक्रम)

1. Diagram Portfolio (चित्र कला)

Draw neat and well-labeled diagrams of the following on A4 sheets:

- Human Digestive System (मानव पाचन तंत्र)
- Cross-section of Human Heart (मानव हृदय की संरचना)
- The Nephron (वृक्काणु की संरचना)
- Stomata: Open and Closed (रंध्र: खुला और बंद)

2. Experimental Report

Write a detailed report on the experiment to show that **Chlorophyll is essential for Photosynthesis**. Include materials required, procedure, observations (Iodine test), and conclusion.

3. Comparative Study

Create a comparison chart between **Aerobic (वायवीय)** and **Anaerobic (अवायवीय)** respiration focusing on site of reaction, energy yield, and end products.

Section C: Board Exam Challenge (बोर्ड परीक्षा चुनौती)

Solve these Previous Year Questions:

1. Describe the mechanism of urine formation in humans.
2. What is a Redox Reaction? Identify the oxidized and reduced substances in:
$$\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$$
3. Explain the process and significance of **Double Circulation**.

Instructions:

- Work can be done in Hindi or English.
- Ensure all chemical equations are 100% balanced.
- Use colorful labels for biological diagrams.

- Submit in a neat practical folder on the first day of school.

Best of luck for your holidays! Stay curious.

Class 10 Social Science Holiday Homework

Section A – Creative Work

1. Draw a political map of India and mark:
 - Neighboring countries
 - States bordering the sea
2. Prepare a **timeline** of 10 important events of the Indian National Movement.

Section B – Activity Based

1. Interview any elder family member and ask:
 - How life was different 20 years ago?
 - Write 5 changes in society and economy.
2. Collect wrappers/logos of 5 multinational companies and paste them in a notebook.
Write:
 - Country of origin
 - Products they sell in India

Section C – Geography Fun Task

Make a mini chart on any one:

- Water Conservation
- Sustainable Development
- Types of Resources

(Add pictures or drawings)

Section D – Civics Corner

Write short notes (50–60 words each) on:

1. Democracy
2. Fundamental Rights
3. Power Sharing

Section E – Economics in Daily Life

Observe your home market/shop and write:

- 5 things whose prices increased recently

- Why prices increase according to you?