# BHAI PARMANAND VIDYA MANDIR HOLIDAYS HOMEWORK

# **CLASS VII** (2025-26)

**THEME:** Technology & Sustainability Improving Our Lives

# **GENERAL INSTRUCTIONS:**

- → Holiday Homework carries marks in assessment. Hence, submission of work post vacation is compulsory for all students.
- → Parents are requested to only guide their children while doing the assignment.
- → Originality and neatness of the work will be appreciated.
- → Questions must be done in the given sequence.
- → The child will be assessed for the handwriting, presentation, neatness, completion of all the given questions, indexing of the work.
- → It is mandatory to do all the activities; however there may be internal choices.
- → Do all the written work on A4 sized sheets (except where mentioned otherwise)
- → For Submission, Keep all work subject-wise in separate clear bags or stick files.



# **ENGLISH**

#### 1. TOPIC: BE AN ORATOR

**DESCRIPTION:** Speech is the art of conveying a message to the audience through words. The speech is considered best if it is written to engage the audience and hold their attention from the starting to the end.

#### **METHODOLOGY:**

- Watch the **two sample speeches** shared via the YouTube links.
  - I Have a Dream speech by Martin Luther King .Jr HD (subtitled)
  - Let Girls Learn Michelle Obama
- Observe how the speaker **starts**, **explains**, **and ends** the speech.
- Write your own **original speech** (300–350 words) on the **topic allotted to you as per your roll number**. The speech should be written in the proper format.
- It should include **quotes/incidents** which will inspire everyone with reference to the topic.
- Use the **phrases** provided below.

#### PHRASES TO USE IN THE SPEECH:

"In an era defined by change and challenge..."

"I feel honored to speak on such an important topic."

"Let me walk you through..."

"What I really want to emphasize is..."

"What if I told you...?"

"Our voices are powerful—let's use them to create ripples of change."

"Let me quote..."

"I'm sure many of you would agree..."

"Our minds may be young, but our dreams are limitless."

"Let this be the generation that redefined possibility."

"The future is not written yet—it's waiting for our signature."

"Let me leave you with this thought..."

#### **SPEECH TOPICS:**

Roll no. 1-5	- Progress vs. Environment – Where Do We Draw the Line?
<b>Roll no. 6-10</b>	- The Value of Mindfulness in a Distracted World
Roll no. 11-15	- Minimalism – Living with Less to Live More
Roll no. 16-20	- Can Money Buy Happiness?
Roll no. 21-25	- Being Different is a Strength, Not a Weakness
Roll no. 26-30	- Why Emotional Intelligence is as Important as IQ
Roll no. 31-35	- The Importance of Having a Personal Code of Ethics
Roll no. 36-40	- The Role of Curiosity in Scientific Discovery
Roll no. 41-45	- Failure teaches more than Success

# MATERIAL REQUIRED: Use A4 sized sheets for this topic.

# **Y** Environmentalists / Climate Activists

R. No.	Name	Identity
1	Greta Thunberg	Climate Activist
2	Sunita Narain	Environmentalist
3	Arun Krishnamurthy	Environmental Reformer
4	Narayana Peesapaty	Sustainable Innovator
5	Jadav Payeng	Forest Creator
6	Ridhima Pandey	Young Climate Activist
7	Chetan Singh Solanki	Solar Energy Advocate
8	Kavita Shukla	Eco-Innovator
9	Dia Mirza	Eco Ambassador
10	P.C. Jain	Green Advocate
11	Sonam Wangchuk	Climate Educator
12	Kehkashan Basu	Youth Environmental Leader
13	Bittu Sahgal	Environmental Journalist

# **?** Innovators / Entrepreneurs / Scientists

R. No.	Name	Identity
14	Dr. Harish Hande	Social Innovator
15	Pavan Sukhdev	Green Economist
16	Anirudh Sharma	Tech Innovator
17	Rohit Puranik	Plastic Recycler
18	Dinesh Chauhan	Eco Entrepreneur
19	Anshu Gupta	Social Entrepreneur (Goonj)
20	Arpit Dhupar	Pollution-Based Ink Innovator
21	Piyush Verma	Water Conservationist
22	Vaibhav Lodha	Youth Changemaker

# 🧠 Leaders / Politicians / Policy Makers

R. No.	Name	<b>Identity</b>
23	Narendra Modi	Prime Minister of India
24	Justin Trudeau	Prime Minister of Canada
25	Elon Musk	Tech Visionary
26	Barack Obama	Former US President
27	Ratan Tata	Business Leader
28	Joe Biden	US President
29	Bill Gates	Tech Philanthropist

# m Corporate Leaders / Tech Icons

R. No.	Name	<b>Identity</b>
30	Sundar Pichai	Google CEO
31	Jeff Bezos	Amazon Founder
32	Tim Cook	Apple CEO
33	Sundar Pichai (again)	Tech Executive

# Artists / Authors / Public Figures

R. No.	Name	Identity
34	Leonardo DiCaprio	Actor & Environmentalist
35	Gul Panag	Actor & Activist
36	Manasi Subramaniam	Literary Editor
37	Usha Raghunath	Sustainable Fashion Designer
38	Kritika Saxena	Eco Architect
39	Chris Hemsworth	Actor
40	Dia Mirza	Actress & Environmentalist

# **Educators / Economists / Writers**

R. No.	Name	Identity
41	Gaurav Sharma	Diplomat & Author
42	Saumya Saxena	Research Scholar

- 43 Abha Joshi Ghani Urban Economist
- 44 Bittu Sahgal Editor Sanctuary Asia

#### 2. TOPIC: <u>TECH TALKS: FUTURE IN FOCUS</u>

#### Part 1: Real Interview (Video)

Who to Interview: Interview a parent, grandparent, sibling or neighbour.

#### What to Do:

- Ask any 5 questions from the list below.
- Record a short video of the interview.
- Make sure your voice is clear and you show good listening skills.
- Start by introducing who you are interviewing and end by thanking them.

#### Sample Questions (choose any 5):

- a. What is one smart device in your home that helps you save energy or water?
- b. Have you ever changed a habit because of an app or website that taught you about the environment?
- c. Do you think digital tools like e-books and online meetings have helped reduce pollution? Why or why not?
- d. How has grocery shopping or cooking become more eco-friendly with the help of technology?
- e. Have you used a bicycle-sharing or electric scooter service? What was your experience like?
- f. What kind of sustainable technologies do you hope to see in homes in the next 10 years?
- g. How has the way people throw away trash or recycle changed in the past 10–15 years?
- h. Do you use any apps or gadgets to track how much energy your home uses?
- i. What role do you think technology plays in reducing food waste at home or in restaurants?
- j. Do you remember your first experience using a device that helped save resources? What was it?

**Submission:** Paste the link of the video in the slide provided for the same in the English Google Classroom.

Nothing with respect to question framing task

#### Part 2: Written Imaginary Interview (Dialogue Format)

#### What to Do?

- Imagine you are interviewing a personality allotted to you according to your roll number.
- Write a dialogue with at least 12 questions and their answers. (excluding basic introduction and courtesy sake questions)
- You are not allowed to use the questions which are given in Part 1.
- Start with a greeting and end with a thank you.
- Include questions which ask for their achievements and opinions around the theme,
- Use neat handwriting and proper format for the written interview.
- Use your creativity and think carefully about your questions and answers.
- Necessarily use the following words in your interview- breakthroughs, trailblazing efforts, outlook, insight, notable contributions, cutting-edge, groundbreaking, zero-waste lifestyle, commendable, idealistic, user-centric, transformative, tenacious, "Looking back, I think the key was..."

MATERIAL REQUIRED: Use A4 sized sheets for this topic.

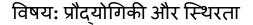
<b>3. Task 3: Revision Worksheet-</b> Do all the worksheets on A4 sized sheets which will be uploaded on Google Classroom.		

# हिंदी

# हिंदी ग्रीष्मकालीन गृहकार्य 2025-26 (कक्षा -सातवीं )

## सामान्य निर्देश:

- मूल्यांकन हेतु ग्रीष्मकालीन गृहकार्य समस्त विद्यार्थियों के लिए अनिवार्य है।
- अभिभावकों से निवेदन है कि छात्रों का उचित दिशा में केवल मार्गदर्शन करें।
- क्रमानुसार सभी प्रश्नों के उत्तर शुद्ध वर्तनी में पूर्ण कीजिए।
- सभी गतिविधियों को स्पष्ट व स्ंदर लेख में करना अनिवार्य है।
- कार्य 1 व 3 अपनी व्याकरण पुस्तिका में करें |
- कार्य 2 A4 आकार के पृष्ठ पर करें |





प्रौद्योगिकी और सतत विकास हमारे जीवन को नवोन्मेष, सुविधा और संतुलित प्रगति की ओर ले जा रहे हैं। आधुनिक तकनीकें ऊर्जा दक्षता, जल संरक्षण और हरित ऊर्जा के क्षेत्र में क्रांतिकारी परिवर्तन ला रही हैं। सतत विकास के सिद्धांत पर्यावरण संतुलन बनाए रखते हुए आर्थिक और सामाजिक उन्नति को सुनिश्चित करते हैं। इस समन्वय से ही एक समृद्ध और सुरक्षित भविष्य संभव है।

# कार्य 1 : अन्च्छेद लेखन

ई-कचरा प्रबंधन और पुनर्चक्रण -विषय पर निम्नितिखित संकेत बिंदुओं की सहायता से १५०-२०० शब्दों मे अन्च्छेद लिखिए।

- ई- कचरा क्या है ?
- ई-कचरे के प्रभाव
- ई-कचरा प्रबंधन के तरीके

- पुनर्चक्रण के लाभ
  ई-कचरा प्रबंधन में चुनौतियाँ व समाधान

कार्य 2: निम्नलिखित प्रश्नों के उत्तर ३० -४० शब्दों में लिखिए |

विषय: प्रकृति और प्रौद्योगिकी का सुंदर संगम

प्रश्न 1 .सतत विकास का क्या अर्थ है?

प्रश्न 2 सतत विकास के तीन मुख्य आधार—पर्यावरण, समाज और अर्थव्यवस्था—एक-दूसरे से कैसे संबंधित है ?उदाहरण सहिंत लिखिए

प्रश्न 3 सतत विकास के लिए बच्चों और युवाओं की क्या भूमिका हो सकती है? क्या विद्यालय और घर में की गई कुछ आदतें इसमें मदद कर सकती हैं? प्रश्न 4 सरकार और समाज किन तरीकों से मिलकर सतत विकास को आगे बढ़ा सकते हैं?

## कार्य 3: पत्र लेखन

आप राघव / रागिनी हैं। अपने छोटे भाई या बहन को 100-120 शब्दों में पत्र लिखते हुए बताइए कि आधुनिक तकनीक के सीमित प्रयोग से आपके जीवन में कौन-कौन से सकारात्मक बदलाव आए हैं।

## **MATHS**

#### **Instructions:**

- 1. Choose only ONE TASK out of the two.
- 2. All research work and calculations must be done on A-4 size pastel sheets.
- 3. All the worksheets should be completed in a thin single-line notebook/A-4 size ruled sheets.
- 4. You must paste the source(s) of your research on your pastel sheets. These can include:
  - Printed web pages
  - Book references
  - News articles or magazines (clearly labeled)
- 5. Ensure your work is **neat**, **organized**, and **well-presented**.

#### TASK-1: SOLAR PANELS AND SUSTAINABILITY

#### **Instructions:**

- 1. **Research**: Find at least two credible sources (articles, reports, or official websites) that provide information on:
  - Historical and current costs of installing solar panels in India.
  - Government subsidies and incentives available for solar installations.
  - Average monthly electricity consumption and costs in households.
  - Electricity generation capabilities of solar panels.
  - Environmental impact of solar energy.
- **2. Data Collection**: Gather data from your sources to answer the following questions. Ensure to note the publication date of each source.
- 3. **Analysis**: Use the data to compare past and present scenarios, highlighting trends, savings, and benefits.

#### **RESEARCH QUESTIONS:**

#### 1. Cost Analysis Over Time

- What was the average cost of installing a 3 kW solar panel system in India 5 years ago? Provide the source and cost.
- What is the current average cost for the same system? Provide the source and cost.
- Calculate the percentage decrease in cost over the past 5 years.

#### 2. Electricity Consumption and Generation

• What is the average monthly electricity consumption (in kWh) of a typical household in India?

- How much electricity (in kWh) can a 3 kW solar panel system generate per month under optimal conditions?
- After installing solar panels, how many units of electricity would a household still need to purchase from the grid?

#### 3. Financial Savings

- Calculate the monthly electricity bill before and after installing solar panels, assuming an average cost of ₹7 per kWh.
- Determine the monthly savings on electricity bills post-installation.
- What is the installation cost of the solar system? Also calculate the payback period in months.
- Estimate the total savings over a 5-year period.

#### 4. Environmental Impact

- If generating 1 unit of electricity from fossil fuels emits 0.9 kg of CO<sub>2</sub>, calculate the annual CO<sub>2</sub> emissions for a household consuming 300 units per month.
- Calculate the annual CO<sub>2</sub> emissions for the same household after installing solar panels that generate 250 units per month.
- Determine the annual CO<sub>2</sub> savings by switching to solar energy.

#### **Graphical Representation:**

- 1. **Bar Graph**: Create a bar graph comparing the cost of installing a 3 kW solar panel system 5 years ago and today.
- 2. Line Graph: Plot a line graph showing the cumulative savings on electricity bills over a 12-month period post-installation.
- 3. **Pie Chart**: Design a pie chart illustrating the proportion of electricity consumed from the grid versus generated by solar panels in a typical month.

## **Conclusion:**

Based on your research and analysis, write a short conclusion addressing the following:

- How has the decrease in solar panel installation costs influenced their adoption among households?
- In what ways has the adoption of solar panels contributed to lower electricity bills for consumers?
- Discuss the environmental benefits observed from increased use of solar energy.

#### **Shocking Fact:**

In just one hour, the sun provides more energy to Earth than the entire world consumes in a year — yet solar panels only capture less than 0.01% of it!

#### What makes this shocking:

Sheer potential: The sun delivers about 173,000 terawatts of energy continuously — that's 10,000 times more than the world's total energy use.

Underutilization: Despite this abundance, we've tapped into only a tiny fraction due to cost, infrastructure, and awareness.

#### Estimation & Ratio Reasoning

The world consumes about 18 TW of energy per year. The sun provides 173,000 TW to Earth in just one hour.

1. Approximately how many years of energy usage could be fulfilled by one hour of solar energy?

#### Energy Conversion & Area-Based Reasoning

Assume 1 sq. m of solar panel receives 1000 W of sunlight and converts 20% of it into electricity.

2. How many square meters of solar panels are needed to generate 1 TW (1 trillion watts) of electricity?

Out of 173,000 TW available from the sun, the world captures only 0.01% via solar panels.

- a) How many terawatts are we currently capturing?
- b) If we increase solar capacity by 500%, what would be the new captured energy in TW?

#### TASK 2: FUELING THE FUTURE

In this research, you will compare **Petrol**, **CNG**, and **Electric Vehicles (EVs)** based on their **energy consumption** and **environmental impact**. You will analyze how much energy each vehicle consumes for a **full tank** or **fully charged battery** and compare their **emissions**.

#### **Instructions:**

- 1. Choose 3 Types of Vehicles:
  - One Petrol/Diesel car
  - o One CNG car
  - One Electric Vehicle (EV)

#### 2. For each vehicle, you will research the following:

- The **average fuel consumption** (km per litre for petrol/diesel, km per kg for CNG, and energy consumption in units per km for EV).
- The energy required to travel 1000 km for each vehicle.
- The **cost of fuel or energy** for each vehicle to travel 1000 km (using current average prices for fuel and electricity).
- The **CO**<sub>2</sub> **emissions** for each vehicle, based on their fuel type (use average emission data for petrol, diesel, and CNG).
- The **environmental impact** of the EV assuming it is charged using renewable energy.

#### 3. After gathering the data, answer the following questions:

#### **Comparison Questions:**

#### 1. Energy Consumption:

- Calculate how much energy is consumed by each vehicle (in terms of fuel or electricity) to travel **1000 km**.
  - For the **Petrol/Diesel Car**, find out how many litres of fuel are needed for 1000 km, and the total fuel cost.
  - For the **CNG** Car, find out how many kilograms of CNG are required for 1000 km, and the total fuel cost.
  - For the Electric Vehicle (EV), calculate how many units of electricity are required for 1000 km and the total electricity cost.

#### 2. Cost Comparison:

- Find the fuel cost for a Petrol/Diesel Car, CNG Car, and the electricity cost for the EV to cover 1000 km.
- Compare how much money would be saved by using a CNG or an EV instead of a Petrol/Diesel car.

#### 3. Environmental Impact:

#### o CO<sub>2</sub> Emissions:

■ Calculate the **CO**<sub>2</sub> **emissions** for the **Petrol/Diesel Car** based on how much fuel it consumes for 1000 km. (Assume 1 litre of petrol/diesel emits approximately 2.31 kg

of CO<sub>2</sub>).

- For the CNG Car, calculate the CO<sub>2</sub> emissions based on the CNG consumption for 1000 km (Assume CNG emits approximately 2.0 kg of CO<sub>2</sub> per kg of fuel burned).
- For the EV, assume it emits zero CO₂ if charged using renewable energy sources.
- Calculate how much CO<sub>2</sub> is saved by using a CNG Car or EV instead of a Petrol/Diesel Car for a 1000 km journey.

## 4. Analysis of the Comparison:

- Which vehicle has the lowest cost for traveling 1000 km?
- Which vehicle has the lowest emissions for traveling 1000 km?
- Which vehicle would save the most money and have the least environmental impact over long distances?

## 5. Calculation and Graphical Tasks:

- A) Fuel/Energy Consumption Table:
- Create a table to show the energy consumption and cost for each vehicle to travel 1000 km
- B) Emission Calculation Chart:
- Create a bar graph that compares the CO<sub>2</sub> emissions of each vehicle for 1000 km.
- C) Cost Comparison Graph:
- Create a bar graph that compares the **total cost** for each vehicle to travel **1000 km**.

#### **Conclusion:**

- Based on your research and calculations, summarize your findings:
  - Which vehicle is the most **economical** in terms of cost for 1000 km?
  - Which vehicle is the **most environmentally friendly** with the least emissions?
  - How does the shift towards **CNG** and **EVs** help in reducing **carbon footprints** compared to traditional **Petrol/Diesel Cars**?

WORKSHEET LINK: Class VII HHW (2025-2026) Maths Worksheet

## **SOCIAL SCIENCE**

## **Submission Guidelines:**

- Complete your assigned task individually on A4 sheets (ruled or plain).
- Compile your work neatly in a project file with a cover page and index.
- Decorate pages creatively with relevant pictures, borders, maps, and use a mix of text and visuals.

# **Instruction & Task Allocation:**

The class is divided into three groups by roll numbers. Each group will complete one task based on their roll number:

Roll Numbers	Assigned Task
1 – 15	Task 1
16 - 30	Task 2
31 – 46	Task 3

(Task details are provided below)

## **Ountry Allocation by Roll Number:**

Each student will research their assigned country and use it as the base for their task:

Roll Numbers	<b>Assigned Country</b>
1, 18, 33	Germany
2, 19, 34	USA
3, 20, 35	Japan
4, 21, 36	UK
5, 22, 37	Russia
6, 23, 38	China
7, 24, 39	France
8, 25, 40	Israel
9, 26, 41	South Korea
10, 27, 42	Vietnam
11, 28, 43	Belgium
12, 29, 44,46	Italy
13, 30, 45	Ukraine
14, 16, 31	Australia
15, 17, 32	Iraq

## **Documentary Viewing:**

After completing their tasks, all students will watch an assigned documentary on **Technology and Sustainability**. This will be followed by a discussion.

- 1. Greenprint for the Future: Eco Innovations from [Your Assigned Country]
- 1. Choose an impactful green innovation (such as smart roads, ocean-cleaning technology, eco-homes, etc.) from your assigned country and do the following:
- 2. Describe the Innovation clearly with visuals (photos, icons, or hand-drawn sketches).
- 3. Compare with a similar innovation in India using the following parameters:

#### 1.Location & Geography

- In which region(s) is this innovation mostly used? (rural/urban, coastal, desert, forested, etc.)
- Why is it suitable for that physical environment?

#### 2. Environmental Impact & Sustainability

- How does it help nature? (reduces plastic, purifies water, protects forests, etc.)
- What type of pollution or problem does it solve?
- Does it protect plants, animals, or natural areas?

#### 3. Civic Life & Community Involvement

- Are local people helping in creating or running this innovation?
- How do schools, women, or youth benefit from it?
- Does it improve health, hygiene, or access to services?

#### 4. Role of Government or NGO Support

- Was this supported by laws, local leaders, or international groups (like the UN)?
- Did the government make any rules or give any help?

#### 5. Economic Impact & Accessibility

- Is it affordable for poor or rural people?
- Does it save money in the long run (like cheaper electricity or fuel)?
- Can small towns or slum areas use it easily?

#### 6. Energy Use & Efficiency

- Does innovation use renewable energy? (solar, wind, water)
- How much energy does it save or produce?
- Does it reduce the need for coal or petrol?

#### 7. Environmental Protests in India

- Explain any significant environmental protest or movement in India.
- Describe the cause, key events, and impact of the protest.

• Discuss how the protest influenced environmental policies or awareness.

#### Task 2: Constitution 2.0: Drafting a better tomorrow

#### **Exploring Fundamental Duties and Sustainable Practices**

**Title:** *Article 51A(h): Fundamental Duty* 

#### **Objective:**

To learn about Article 51A(h) of the Indian Constitution, which talks about developing scientific temper, humanism, and a spirit of inquiry and reform. This task will help you explore how this article is connected to ethical technology and protecting the environment.

#### **Task Details:**

#### 1. What is Article 51A(h)?

- Study the **text of Article 51A(h)** and explain it keeping the following in your mind.
- Why does it focus on scientific temper, humanism, and reform?
- How does it relate to using technology responsibly and caring for the environment?
- Find out why this article was added to the Constitution. What challenges or needs did it aim to address?

#### 2. Real-Life Examples:

Identify real-life examples from India where the values of Article 51A(h) were either upheld or disregarded. You may include:

- Individuals, social reformers, or organisations that promote scientific thinking and progressive change
- Instances where superstition or the absence of rational thinking led to negative outcomes
- Actions by the government or civil society that encourage or hinder critical thinking and inquiry

#### 3. Compare with Other Countries:

- Examine and compare the similar environmental and technology-related laws of India and your assigned country.
- Examine the strengths and weaknesses of India's laws and discuss what lessons can be learned from them.

#### 4. Find Related Articles or Laws:

- Find at least three other Indian constitutional articles or laws about technology and the environment.
- Explain how these articles or laws connect with Article 51A(h).

## **Task Objective:**

You will explore how a major war involving your **assigned country** led to lasting changes in the world — in diplomacy, nuclear decisions, economics, and India's foreign policy. This task will help you understand how **wars go beyond battlefields** to shape the world we live in today.

# Step 1: Choose One War Involving Your Assigned Country

(Assigned countries are already roll-number based.)

## Step 2: Answer the Following Reflective Questions

(Write in short paragraphs or points. Use examples, facts, and names of treaties or leaders where possible.)

#### 1. What made this war unavoidable — and what lessons can nations learn from its cause?

Think about deeper causes (economic rivalry, political alliances, colonization, ideologies). How might better diplomacy or leadership have changed the outcome?

- 2. After the war, how did your assigned country's priorities shift politically, economically, or globally? Did the country become more powerful or weak? Did it focus more on building peace, expanding influence, or preventing future conflicts?
- 3. Were any arms control, nuclear, or military alliances formed because of this war? Why were these important?

Mention actual treaties (e.g., NPT, CTBT, NATO, Warsaw Pact) and how they tried to prevent future wars or reduce weapons.

- **4.** How did this war change the country's economy in terms of industry, trade, or foreign relations? Did it lead to industrial growth, a financial crisis, sanctions, or increased global trade? What opportunities or struggles followed?
- 5. Compare the military technology and warfare strategies used by your assigned country during a major war with those used by India in a similar or relevant wartime context.

You may focus on aspects such as:

- Types of weapons or machinery (e.g., tanks, aircraft, naval ships)
- Communication systems and intelligence
- Cyber or surveillance technology
- Defence strategies and battlefield innovations

#### 6. What global changes did this war trigger that are still relevant today?

Did it lead to the creation of lasting institutions (like the UN, NAM, NATO)? Did it cause tensions or rivalries that still continue?

#### 7. Looking back — could the world have learned the same lessons without this war?

Think deeply: Did progress in diplomacy, science, or peace efforts only come because of the war — or could they have happened without destruction?

#### **Documentaries on Technology and Sustainability**

- 1. Our Planet (Netflix): Roll no 1 to 6
  - **Topic:** The importance of preserving biodiversity and the role of renewable energy in combating climate change.
  - **Insight:** How technology is used in conservation efforts to protect ecosystems.
- 2. The True Cost (YouTube/Netflix): Roll 7 to 12
  - **Topic:** Fast fashion and its environmental impact.

- **Insight:** Encourages students to think about sustainable consumer choices.
- 3. Brave Blue World (Netflix): Roll no 13 to 18
  - **Topic:** Innovative solutions to global water crisis.
  - **Insight:** Explores technologies for water purification and conservation.
- 4. A Plastic Ocean (Netflix/YouTube): Roll no 19 to 24
  - **Topic:** The impact of plastic waste on marine life.
  - **Insight:** Shows how technology can help reduce plastic pollution.
- 5. 2040 (YouTube/Streaming Platforms): Roll no 25 to 30
  - **Topic:** A future vision for a sustainable planet.
  - **Insight:** Covers innovations in renewable energy, agriculture, and waste management.
- 6. Planet Earth II: Cities (BBC/YouTube): Roll no 31 to 36
  - **Topic:** Wildlife in urban environments.
  - **Insight:** How technology can coexist with natural ecosystems in cities.
- 7. The Boy Who Harnessed the Wind (Netflix Drama Based on True Story): Roll no 37 and above
  - **Topic:** A young boy builds a windmill to save his village from famine.
  - **Insight:** Highlights resourcefulness and renewable energy solutions.

## SCIENCE

Theme: Technology and Sustainability – Improving Our Lives

In today's world, technology is no longer just about making life easier—it's about making life more sustainable. Sustainable technologies help reduce our reliance on non-renewable resources, minimize waste, and reduce carbon footprints.

Japan made all of the medals for the 2021 Tokyo Olympics out of discarded smartphones and laptops.



The Tokyo 2020 Medal Project is a powerful example of sustainable technology in action. By extracting precious metals from recycled e-waste like old smartphones and laptops. It promoted responsible recycling practices and demonstrated how valuable materials can be reclaimed and reused on a large scale. This project not only minimized waste but also raised global awareness about the potential of circular economy solutions.

Fact: Tokyo 2020 Olympic medals were made by utilizing approximately 80,000 tons of e-waste collected since February 2017.

Project Objective: To design and develop a sustainable solution (of your choice) that utilizes technology to minimize waste, conserve resources, and promote environmental sustainability.

**Task 1:** To make a Working Model of sustainable solution you choose. Use your Research to explain it in such a creative manner that it includes the criterias mentioned below.

#### **Answer the following:**

- Explain the Scientific principle involved.
- What problem does your model aim to solve? How does it support sustainable development goals (SDGs)? Which SDG goals are met through your solution?
- How does your model use technology to help the environment or society?
- Which sustainable resource(s) does your model use or promote?
- How is your model different from traditional methods or solutions?
- Is your model used in real life anywhere? If yes, where and how and at what scale? If not, what changes can be done to implement it in real life in future?

Task 2: What changes can be made in your solution to meet the increasing need of growing population and pollution?

Add a touch of creativity—decorate your work with drawings, diagrams, or reused materials to showcase both your knowledge and your green spirit!"

## Task 3: Complete

- Thinksheet 3 and 4, Ch: Nutrition in Animals
- Thinksheet 1,3, Ch: Heat and its effect

**Task 4:** Satisfy Your Curiosity! Dive into these engaging videos and discover new wonders that will spark your imagination and deepen your understanding!"

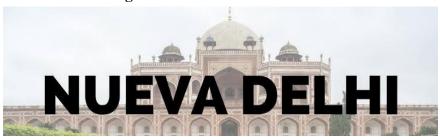
The Plastic Eater Microbes: <a href="https://youtu.be/GUdDXx-prgo?si=CM4xbolnLPuWg1Qc">https://youtu.be/GUdDXx-prgo?si=CM4xbolnLPuWg1Qc</a>

Solar Power Kitchen: https://youtu.be/5ra\_w0o8oCM?si=KbTM9u5zTD1MGVmw

Chernobyl Fungus: <a href="https://youtu.be/uIgSQOtlOG0?si=fsqIcb12nu4lFjnX">https://youtu.be/uIgSQOtlOG0?si=fsqIcb12nu4lFjnX</a>

# **SPANISH**

- 1) Descripcion de un miembro de tu familia(A4)
- 2) Escribe 40 palabras nuevas con significados ( en diccionario)
- 3) Escribe sobre 2 lugares famosos de NUEVA DELHI



4) Tarjeta de estudio( flashcard) con palabaras con la imagen R.No 1-10 Naturaleza

11-20 Sistema solar

21-30 lugares de la ciudad

31-40 Los deportes



# **SANSKRIT**

## आवश्यक निर्देश-

- \*सभी विद्यार्थी संस्कृत गीष्मावकाश गृहकार्य के लिए एक अलग पुस्तिका का प्रयोग करें|
- \* स्पष्टता व वर्णशुद्धता का ध्यान रखें |
- \* अपनी कार्यपुस्तिका में लगे हुए प्रश्नवाचक चिहनों तथा अपने अपूर्ण कार्य को पूर्ण अवश्य करें।
- 1. पचास शब्दों का लिंगानुसार एक संस्कृत शब्दकोश बनाएं तथा उसमें से चार पु. तीन स्त्री. व तीन नपु. शब्दों के शब्दरूप भी लिखें |
- 2. क्रिया के रूप में लट्,लंग व लृट् तीनों लकार का प्रयोग करते हुए व शब्दकोश से शब्दों का चयन करते हुए पचास सरल संस्कृत वाक्य लिखें |
- 3. आप परिवार सिहत जहां भी घूमने गये हैं वहां की पांच फोटो के आधार पर संस्कृत में चित्र वर्णन करें। (प्रत्येक चित्र के आधार पर पांच वाक्य)