

Dear Students

Summer holidays provide an excellent and well-deserved opportunity to relax and rejuvenate while keeping ourselves intellectually stimulated with some fun-filled and thought-provoking activities. The best way to truly refresh oneself and also enhance one's emotional, happiness, spiritual and intellectual quotients, is by engaging in the following activities: -

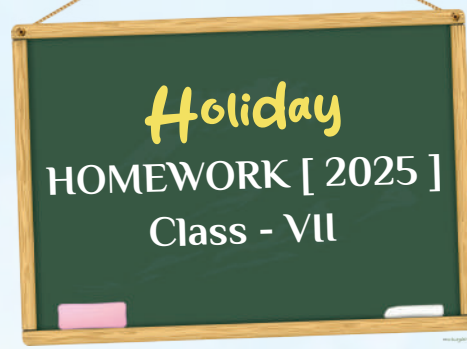
1. Spend quality time with your family eg. playing games, visiting places and doing activities together like painting, dancing, singing, cooking etc.
2. Participate in the household chores.
3. Spend time with nature, observe and appreciate the beauty of nature around you. Nature walks, reading under a shady tree, gardening, keeping your surroundings clean and proper waste disposal are just a few ways.
4. Exercise regularly and play outdoor games.
5. Meditate and do Yoga regularly.
6. Learn any one new skill
7. Eat well and stay healthy. Enjoy the seasonal and local foods of places you visit. In addition, maintain the momentum and rigour that has been built in the learning through the last few weeks. Plan out, revise the syllabus already done and complete the holiday homework as creatively as possible.

Your holiday homework is designed for you to experience the joy of learning while helping you enhance the 21st century life skills as responsible world citizens. It is recommended that you do the homework on your own using assistance only when required. Make use of the materials and resources already available at home.

General Instructions

1. Do all your homework as per the instructions
2. Parents are requested to only guide their children while doing the homework.
3. Originality of the work will be appreciated.
4. Homework will be assessed on the basis of neatness, creativity and originality of ideas
5. If children have created PowerPoint presentations in any subject, they will present their ideas in the classroom.
6. Children have to do the written part of the homework on the A4 sheets (ruled or plain) and follow the instructions given in the questions.
7. Make one folder and keep all the A4 sheets in it.





SUBJECT-ENGLISH

1. Green News Report Challenge! (Speaking)

In this challenge, you have to become a news anchor reporting on a real or fictional climate crisis (like "The Great Delhi Emergency" or "Bengaluru's Disappearing Lakes").

You will script a 1–2-minute news segment featuring headlines, interviews with "experts" (peers or stuffed animals!), and actionable solutions.

You have to record a video of your journalism (use props!)

2. Eco-Fable Writing (Creative Writing + Moral Reasoning)

Write a short fable (like Aesop's) on A4 sheet in about 250 to 300 words where animals/plants confront a climate issue (e.g., a thirsty polar bear, a talking tree). Also end the fable with a moral (e.g., "Small actions today save tomorrow").

Note: You can add colourful doodles or a comic-style illustration to make your story pop!

3. Eco-Ad Poster (Creativity)

Create a poster on A4 sheet to spread awareness about a climate issue. Include the points mentioned below

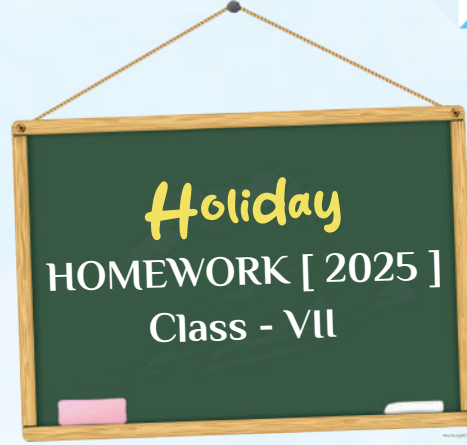
- A slogan
- Eye-catching drawings or recycled art
- Tips to help the planet

विषय -हिंदी

1. जलवायु परिवर्तन के लिए मनुष्य ही अधिक उत्तरदायी है? क्या आप इस कथन से सहमत हैं? अपने उत्तर की पुष्टि हेतु तर्क दीजिए।
2. ग्लोबल वार्मिंग भी जलवायु परिवर्तन का एक नाम ही है। कथन के परिप्रेक्ष्य में ग्लोबल वार्मिंग को स्पष्ट कीजिए।
3. वर्तमान पर्यावरणीय समस्याओं का हल सतत् विकास में निहित है। सतत् विकास के मुख्य बिंदुओं का उल्लेख करते हुए बताइए कि आप इसमें क्या योगदान दे सकते हैं? परियोजना तैयार कीजिए।
4. परियोजना शीर्षक: "कचरा नहीं, खज़ाना है!"

निर्देश: नीचे दिए गए प्रश्नों के उत्तर देकर पुनर्चक्रण पर आधारित अपनी परियोजना तैयार करें।

1. पुनर्चक्रण क्या होता है?
2. किन-किन वस्तुओं का पुनर्चक्रण किया जा सकता है?
3. किन वस्तुओं का पुनर्चक्रण नहीं किया जा सकता?
4. पुनर्चक्रण के क्या लाभ होते हैं? कम से कम तीन लिखिए।



SUBJECT-MATHEMATICS

Climate Change

1. If global temperature rises by 0.2°C every decade, how many decades will it take for a 1°C increase?
2. A country wants to cut its 200 million tons/year carbon emissions by 40% in 10 years. What is the target emission per year?

Sustainability

3. A solar panel generates 300kWh/month while a household uses 600 kWh/month. What percentage of energy needs are met by solar power?
4. A water-saving shower uses 6 liters/minute. How much water is saved in a 10-minute shower compared to one using 12 liters/minute?

Renewable Energy

5. A wind turbine produces 500kWh/day. If a home uses 20 kWh/day, how many homes can it power?
6. If a company invests ₹100,000 in solar panels generating 10,000 kWh/year and sells electricity at ₹0.20/kWh, in how many years will it recover the cost?

Carbon Footprint

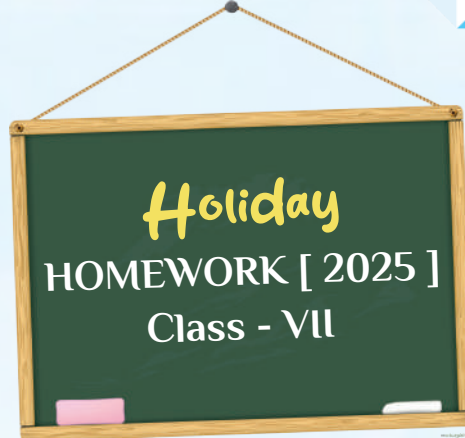
7. A car emits 200 grams of CO_2 per km. How much CO_2 is emitted for a 50 km daily commute?
8. If 1 kg of meat emits 10 kg of CO_2 , how much CO_2 is produced by weekly consumption of 1 kg over a year?

Environmental Impact

9. A forest absorbs 30 tons of CO_2 per hectare per year. How much CO_2 does 500 hectares absorb in 5 years?
10. A city plans to reduce 1000 MW of energy use by 25%. What is the new energy target?
11. Using 2 plastic bags a day, each 5g, how much plastic is used in a year in kg?
12. A company cuts daily water usage from 1000 liters by 30%. How much water is saved each day?
13. If each tree absorbs 20 kg CO_2 annually and there are 1000 trees, what is the total absorption?
14. A household uses 500 kWh/month. After a 15% reduction, how much electricity is saved?
15. A country wants to boost renewable energy from 1000 MW by 50% in 5 years. What's the new target?

Sustainable Practices

16. A person switches from driving 20 km daily to cycling at 15 km/h. How much time is saved per day?
17. A company produces 1000 units/day using 2 liters of water each. What is the total daily water use?



18. A solar panel generates 250 kWh/month. If a home uses 400 kWh, what percent is covered by solar energy?
19. Recycling 2 kg of paper/week saves 10 kg CO₂ per kg. How much CO₂ is saved in a year?
20. A city generates 500 tons of waste daily and aims to reduce it by 20%. How many tons are reduced per day?

Case Study

Designing a Sustainable Community a town wants to design a sustainable community with green spaces, renewable energy, and eco-friendly transportation. The town has a population of 10,000 people and aims to reduce its carbon footprint.



Carbon footprint = Electricity usage x Carbon footprint per kWh

(i) If the town currently emits 100,000 tons of CO₂ per year and wants to reduce it by 25%, how many tons of CO₂ will it emit after reduction?

- (a) 30,000 tons/year (b) 45,000 tons/year (c) 60,000 tons/year (d) 75,000 tons/year

(ii) If each hectare of green space absorbs 20 tons of CO₂ per year, how many hectares of green space will be needed to absorb the town's reduced carbon footprint?

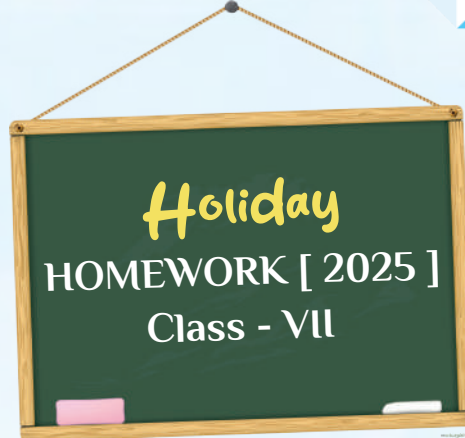
- (a) 1,550 hectares (b) 2,250 hectares (c) 3,750 hectares (d) 4,350 hectares

(iii) If the town installs solar panels that generate 500 kWh of electricity per day, and each household uses 20 kWh per day, how many households can be powered?

- (a) 15 households (b) 25 households (c) 30 households (d) 35 households

(iv) If the town reduces its energy consumption by 30%, and the current consumption is 1000 MW, what will be the new energy consumption?

- (a) 500 MW (b) 600 MW (c) 700 MW (d) 800 MW



SUBJECT SCIENCE

Research Project – Mitigation of Climate Change at Root Level

1. Conduct a study on climate change and find out the steps to be taken at an individual level in our day-to-day life to mitigate (minimize) the cause for climate change.
Present your research study by using Power point Presentation limiting it to 6 - 8 slides and present in the class with speaking duration of two minutes.
2. Analyze the repositories used in your kitchen. Find out the ratio of use of the plastic containers in comparison to other objects.
Provide list of better alternatives with the same amount of efficacy. Submit 1 - 2-page(s) summarization on your research conducted and also prepare a speech of 1 minute for the same.
Note-1: Work should be neatly presented in a file or compiled as a single PDF if submitting digitally.
Note-2: Handwritten work is highly encouraged.

SUBJECT-SOCIAL SCIENCE

Note: Choose **any two** from the activities given below:

1.Weather Diary:

Record a diary for 15 days and note the daily temperature, rainfall, or any extreme weather events. Analyse if these patterns align with the typical weather of your region.
Question: How do these observations indicate the impact of climate change in your area?

2.Energy Audit:

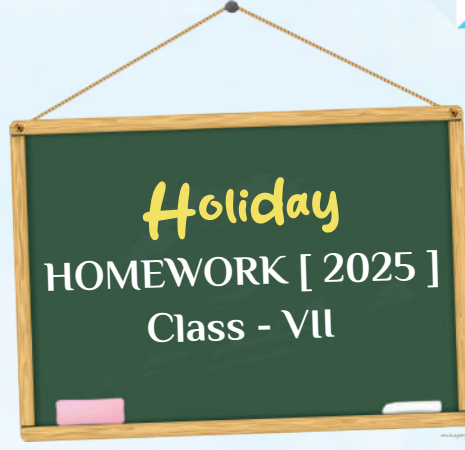
Observe your household's energy consumption for a week (electricity, fuel, etc.). Identify areas where energy is wasted.
Question: What measures can you suggest to reduce energy consumption at home?

3.Poster Making:

Design a poster on A4 sheet highlighting how small changes in daily habits can contribute to combating climate change.
Question: How would you inspire your friends to follow sustainable practices using this poster?

4.Story Writing:

Write a short story imagining life in the year 2050 if climate change is not controlled.
Question: What solutions in your story could prevent this future?



5.Sustainable Gardening:

Create a small home garden using biodegradable waste or old containers. Grow plants that require minimal water.

Question: How does growing your food reduce your carbon footprint?

6.DIY Recycling Project:

Use waste materials to make something useful (e.g., a pen stand from cans or a bag from old clothes).

Question: How does recycling help in managing waste sustainably?

Case Study:

Research a city or country that has implemented effective measures to combat climate change (e.g., Copenhagen or Bhutan).

Question: What can your city or country learn from their efforts?

Impact of Climate Change on Animals:

Research how climate change affects a specific animal species (like polar bears or coral reefs).

Question: What measures can humans take to protect these species from the effects of climate change?

विषय: – संस्कृतम्

“ वृक्षारोपणस्य लाभा: “ इति विषये संस्कृते दश वाक्यानि चित्रैः सह लिखत ।
या

“ पर्यावरण-संरक्षणम् “ इति विषये संस्कृते दश वाक्यानि लिखत । पोस्टर अपि निर्माणं कुरुत ।

SUBJECT-FRENCH

Trouvez 10 mots avec le sens basé sur le changement climatique et le développement durable et formulez des phrases en utilisant chaque mot.

SUBJECT-GERMAN

Finden Sie 10 Wörter mit Bedeutungen, die auf dem Klimawandel und der nachhaltigen Entwicklung basieren, und formulieren Sie Sätze mit jedem Wort.