



**IMPERIAL HERITAGE SCHOOL  
SECTOR-102, GURUGRAM**



**HOLIDAY**

**HOMESCHOOLWORK**

**SESSION 2022-23**

**GRADE-X**

**THEME**

**GLOBAL WARMING**



***“In the summer, the days are long, stretching into each other. Out of school, everything is on pause and yet happening at the same time, this collection of weeks when anything was possible.”— Sarah Dessen***

Dear Parents,

The above quote explains summer in its entirety. The summer season brings along a much needed break from the routine so that we are all ready and rejuvenated to work harder and smarter to achieve our true potential both academically and co scholastically when we join back. Summer vacation is the time when children can be more independent, inquisitive and creative. This is the time to nurture and develop skills, other than intellectual skills. This is the time to get together and enjoy as a family without the stress of deadlines and examinations eating into the “US” time. Take this opportunity to bring out the child in you and try to fulfill some of your childhood dreams with your child as your partner. Trust me, this way you will make memories that you will cherish your lifetime.

Let me in the same breath reiterate that we are sending along some fun filled tasks for your child to remain connected with academics. Holiday homework is focused on bringing out the creative and latent talents and skills of the children in a manner that will be both enjoyable and educative.

*Some activities that you can do with your child this summer:*

- Learn a new hobby – swimming, roller skating, cricket, karate, golf, summer camp etc.
- Play a game together every day. Computer games are good for the brain , but what about the rest of your body? You do need some exercise, don't you? Indulge in cycling, playing badminton, cricket, kho-kho, hide n' seek ..... anything that makes you run.
- Visit a new place if possible.
- Read the newspaper daily.
- Go for walks as a family. You will realize you have two of the greatest gifts of life.... NATURE and your FAMILY.

*A word of advice for my children:*

- Read at least two books of your interest during the vacation.
- This is your chance to take care of your parents, grandparents, elders and even your younger brothers and sisters. You can surely be of some help to your family members.
- Ask your family members if they need some help and then do the needful.

*Let me end with a beautiful poem by Paul Laurence Dunbar.*

*"Oh, summer has clothed the earth  
In a cloak from the loom of the sun!  
And a mantle, too, of the skies' soft blue,  
And a belt where the rivers run.*

*And now for the kiss of the wind,  
And the touch of the air's soft hands,  
With the rest from strife and the heat of life,  
With the freedom of lakes and lands.*

*I envy the farmer's boy  
Who sings as he follows the plow;  
While the shining green of the young blades lean  
To the breezes that cool his brow.*

*He sings to the dewy morn,  
No thought of another's ear;  
But the song he sings is a chant for kings  
And the whole wide world to hear.*

*He sings of the joys of life,  
Of the pleasures of work and rest,  
From an o'erfull heart, without aim or art;  
'Tis a song of the merriest ..."*

*Enjoy your summer vacations. May you all have an exciting summer full of cheer and fun.*

Regards,  
Ms. Neelu Sharma  
Principal

**H**appy  
**S**ummer  
**H**olidays



*The time is past when humankind thought it could selfishly draw on exhaustible resources. We know now the world is not a commodity.*

*-Francois Hollande*

Earth is our beautiful and precious home. The over-whelming majority of the world's climate scientists agree that man-made climate change is a reality. It's a fact that seas climbing our shores, devastating floods, droughts etc., have become more frequent facts of life. We are beginning to understand that seasons are changing beyond recognition and its dangerous consequences are affecting our health. It is our moral responsibility to address this crisis. To create awareness among the young minds for a healthy planet and to create sustainable clean energy for the future, the school has taken up "Global Warming" as a part of Class X holiday homework theme. This will help build awareness about climate change and its consequences among the students.

## ENGLISH

### 1. Research Work

Do research on any ONE eminent personality of your choice across the globe, who has contributed tremendously towards Global Climate Conservation. Write it on A4 size sheet and present your research work neatly.

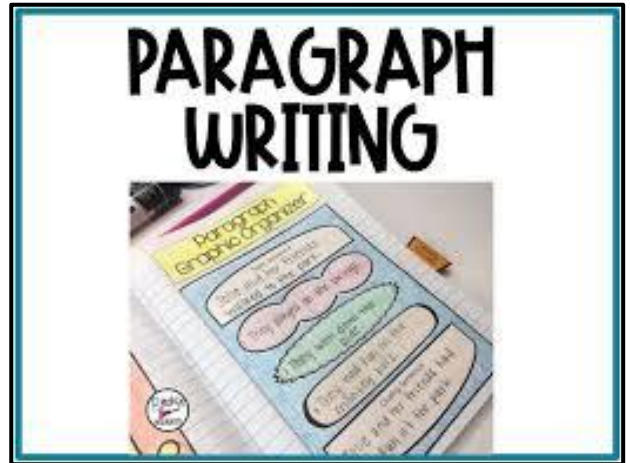
You may include the following: -

- ✓ Bio-Sketch of the personality
- ✓ Pictures and reports
- ✓ Projects and extra-ordinary work undertaken
- ✓ Contribution to the society
- ✓ Achievements and laurels



## 2. Descriptive Paragraph Writing

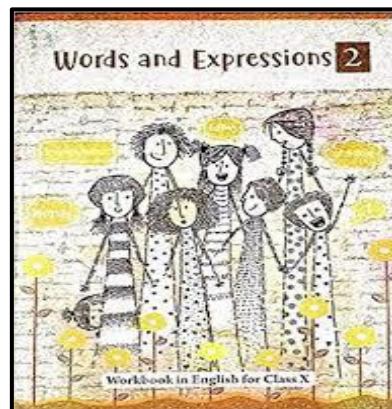
Use the hints provided to create a paragraph of about 150 -200 words on the topic- 'Mother Earth needs healing'. Illustrate your work as well. (Clues- Earth- home- deforestation- depletion of ozone layer- pollution- plant trees- surroundings clean- fresh air- clean fuels- renewable sources of energy- be a planet saviour- keep your surroundings clean- create awareness- happy Earth- happy future)



Write it on A4 size sheet and present it creatively.

## 3. Words & Expressions Workbook - II

Complete all the exercises - Unit 1 to 4 in the Words and Expressions Workbook - II prescribed in the CBSE curriculum.



## 4. Suggested Reading

'The Diary of a Young Girl' by Anne Frank is a long reading text prescribed by CBSE for extensive study. Please find the link below for online reading. Write the summary of the novel in 150-200 words and present it creatively with an illustration. Happy Reading!

[https://cbseacademic.nic.in/web\\_material/doc/novels/3\\_The%20Diary%20of%20a%20Young%20Girl.pdf](https://cbseacademic.nic.in/web_material/doc/novels/3_The%20Diary%20of%20a%20Young%20Girl.pdf)



# HINDI



- १) हम सब जानते हैं कि हमारे देश की तरक्की में किसानों का कितना महत्वपूर्ण योगदान रहता है। ग्लोबल वार्मिंग एक ऐसा पर्यावरणीय मुद्दा है जिसकी वजह से किसानों की फ़सलों को बहुत नुकसान होता है। आप A4 साइज़ शीट पर एक कहानी के माध्यम से दर्शाएँ कि ग्लोबल वार्मिंग किसानों की फ़सलों व उनके जीवन को किस प्रकार प्रभावित करता है।
- २) वायु मंडल पर ग्लोबल वार्मिंग के नकारात्मक प्रभावों को A4 साइज़ शीट पर एक आकर्षित पोस्टर को रूप में दर्शाएँ।

# MATHS

## Activity 1:

Students will do survey based projects cover various aspects of developed countries USA, Japan, Germany and developing countries India, China and Bangladesh.



## **Comparative analysis of :**

- i) % of gases emitted in above mentioned countries.
- ii) % of people affected due to these gases (Diseases and Disorders) in above mentioned countries
- iii) Present the result in the form of "DOUBLE BAR GRAPH"

## Activity 2:

List any three activities which are responsible for natural disasters caused due to climate change and do the comparative analysis of:

- i) %  $CO_2$  emission per metric tonne
- ii) %  $SO_2$  emission per metric tonne

## PRACTICE QUESTIONS

NCERT BOOK :

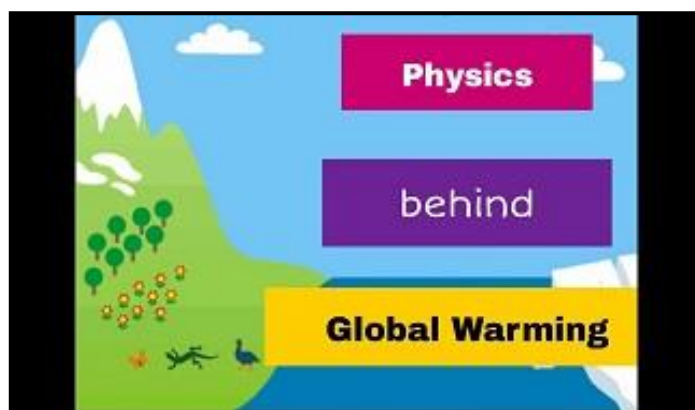
- DO Ex - 2.4 and Ex 3.7

NCERT Exemplar

- Do 10 practice sums daily from book from CH - 1 CH - 2 and CH - 3. Make a different notebook for this.

## PHYSICS

Much of physics is the study of energy and its transformation, and energy lies at the heart of important environmental issues. Climate is shaped by how the energy of the Sun affects movement of the atmosphere and oceans and how they in turn distribute energy around the world. Most of the impact of humans on the environment revolves around the need for energy production.



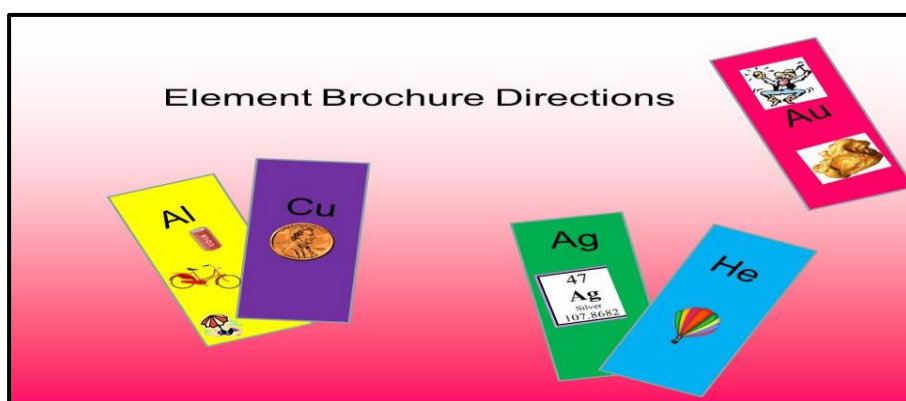
### Activity-1:

- Make a research project on "Global Warming and the Role of Physics in its Reduction".
- Write in A4 size white sheet and should be assembled in a simple transparent folder.

### Activity-2:

Make a neat and Labelled Diagram of Human eye structure on a white (A4 or A3) sheet.

## CHEMISTRY



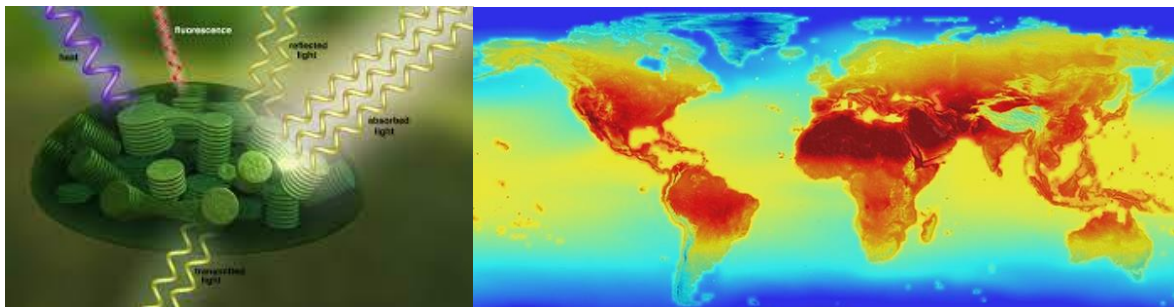
Global warming is the increase of average temperatures on Earth (about 1°C), caused by massive industrial activity since the 19th century. 1°C does not seem like a large increase, but it actually represents a big disruption in global atmospheric and oceanic cycles, and causes a significant sea-level rise.

Students need to make a brochure (5 pages) on any one of the element /gas responsible for global warming. In this we wish that student research on the nature of the element, physical and chemical properties of the element and how that element effects our environment .Apart from this students could also show the Diagrammatic representations also which could have labels or other annotations, intended to be interpreted as non-spatial and elements with visual properties such as colour and texture.

## BIOLOGY

### Activity 1:

#### Plants Buy Us Time to Slow Climate Change - But Not Enough to Stop It



In this activity you need to connect the concepts of Photosynthesis read in the Chapter 6: Life Processes with the issue of global warming and make a report on A4 size sheets answering following questions:

- Write a note on optimum temperature for the process of photosynthesis. What happens to stomata when heated?
- Elevated carbon and higher temperatures negatively impact photosynthesis. How?
- Does elevated carbon dioxide mean an elevated rate of photosynthesis?
- Ultraviolet (UV) radiation from the sun both affects and is affected by global climate change, and anything that affects sunlight, affects UV. What happens to the chlorophyll when exposed to increased UV radiation?

### Activity 2:

Make a multimedia presentation on the below mentioned topics (as per the roll numbers allotted)

#### a) Global warming and Permafrost (Roll number 1-6)

What is Permafrost and what is it made up of? How does global warming affect Permafrost? How does the thawing of Permafrost affect the ecosystem?





### b) Global warming and migration (Roll number 7-12)

How does global warming affect migration? Explain with suitable examples. What are the consequences of species migration?



### c) Melting glaciers is a serious threat to the environment (Roll number 13-17)

How are Glaciers the great guardians of the stability of the planet's climate? How does melting glaciers affect the environment?



#### Activity 3:

This activity is based on Chapter-16: Management of Natural Resources. This activity will be incorporated in the portfolio and marked as per the directives received from CBSE. In this activity, we wish you to make a detailed report on the topics as per the roll numbers mentioned below on A4 sheets:

#### Forests and Wildlife (Even Roll numbers)

Topics to be covered:

- a) Forestry in India, Significance of Forests, Stakeholders of Forests, Deforestation and conservation of Forests.
- b) Importance of Wildlife, Threats to Wildlife, Endangered species, Conservation of Wildlife.
- c) People's Participation in Conservation and Management of Forests.

#### Water for all and Water Harvesting (Odd Roll numbers)

Topics to be covered:

- a) Water Resources, Deterioration of Water Resources, Water Pollution, Management and conservation of Water Resources, Dams.
- b) Need of Water Harvesting, Rainwater Harvesting, Watershed Management, Benefits of Underground Water.
- c) People's Participation in Conservation and Management of Water

# SOCIAL SCIENCE

The **Earth is warming up**, and humans are at least partially to blame. The causes, effects, and complexities of global warming are important to understand so that we can fight for the health of our planet.



## Activity 1:

With this idea of saving Earth present a Pictorial **Conservation Info graphics** on an A3 size sheet giving information about Save Earth using Solution, diagrams and statistical graphs.

An **info graphic** is a visual representation of any kind of information or data. An info graphic is a collection of imagery, data visualizations like pie charts and bar graphs, and minimal text that gives an easy-to-understand overview of a topic. As in the example below, info graphics use striking, engaging visuals to communicate information quickly and clearly.

## Activity 2:

Global warming is primarily influencing economic growth through damage to property and infrastructure, lost productivity, mass migration and security threats.

With a help of a bar graph on an A4 size sheet show the impact of Global warming in the economy of any ten states of India.

## Activity 3: (Compulsory Project)

You have to prepare a compulsory project on the one any topic:

**Consumer Awareness**

**OR**

**Social Issues**

**OR**

**Sustainable Development**

Make a file of your choice with A4 size sheets only. Sheets can be colourful or plain. Presentation should be good. If you have you can paste pictures related to the topic or you can draw also. The project should include the following:-

- ✓ Cover page (Name, Class/sec,)
- ✓ Acknowledgments (Thanksgiving to those who helped you in understanding the concept of the project).
- ✓ Conclusion (your views)
- ✓ Bibliography (all the sources of information where you gathered the information from?  
example: books, internet links etc)

## FRENCH

Ecrivez un petit article sur la protection de l'environnement et prépare une affiche.

- Révise passe compose, futur antérieur, futur simple et complétez leçon-1 et 2 dans le cahier d'exercices.
- Ecrivez une lettre à votre ami en décrivant comment vous passez vos vacances à la maison.



## COMPUTER SCIENCE (AI)



Create a model of a town/city in Minecraft Education version which will have sustainable solutions to ultimately reduce the effect of Global Warming. Record the video of your project with explanation and upload on teams.

Download Minecraft Education version from the website <https://education.minecraft.net/en-us/> and use your Teams Id and Password to login.