



IMPERIAL HERITAGE SCHOOL
SECTOR-102, GURUGRAM

SESSION 2024-25



HOLIDAY HOMEWORK

**GRADE
VIII**



"Celebrate the magic of summer vacation, where every day holds the promise of adventure and every moment is a memory in the making."

**Dear Parents
Greetings!**

Summer vacation is a time to escape the confines of the classroom and immerse ourselves in the wonders of the world around us. Whether it's exploring exotic destinations, embarking on outdoor adventures, or simply enjoying the freedom of lazy days spent with friends and family, summer vacation is a cherished time filled with possibilities.

Summer Vacation is the time for the children to explore their multitude interest and indulge in various activities and projects which would lead to their all-round development. We have designed the Holiday Homework in such a way that their creative and hidden talents are surfaced and they will also be able to develop skills like relating, thinking, concluding, inferring etc. With a little creativity and an open mind, the possibilities for a fulfilling summer vacation are endless.

As we reflect on the memories made and the experiences shared during our summer adventures, let us carry the spirit of vacation with us into the new school year. Let us approach each day with a sense of curiosity and wonder, eager to learn and grow from the world around us. And let us never forget the joy and freedom that summer vacation brings, reminding us of the endless opportunities that await us each and every day.

So here's to summer vacation – may it be filled with laughter, adventure, and unforgettable memories that will last a lifetime.

Summer parenting can be both rewarding and challenging, as it often involves balancing work, childcare, and making the most of the season's opportunities for fun and relaxation.

Here are some vital suggestions for navigating summer parenting:

- **Create a Schedule:** While summer is a time for relaxation, having a schedule can help maintain consistency and structure for both you and your children. Include time for activities, chores, meals, and downtime.
- **Plan Engaging Activities:** Keep your children active and engaged with a variety of activities such as outdoor sports, yoga, exercise, arts and crafts, nature walks, swimming, and visits to local parks or museums.
- **Encourage Independence:** Use the summer as an opportunity for your children to develop independence and responsibility. Allow them to make choices, take on age-appropriate tasks, and solve problems on their own.
- **Limit Screen Time:** While it's tempting to let children spend hours on electronic devices, set limits on screen time and encourage other forms of entertainment and learning, such as reading, imaginative play, and outdoor exploration.
- **Maintain Learning:** Incorporating learning activities into your child's routine. This can include reading a book, writing practice in the languages, taking dictation, reading dictionary for new words, practicing math skills etc.
- **Model Self-Care:** Show your children the importance of self-care by prioritizing your own well-being. Make time for relaxation, exercise, meditation, hobbies, and spending quality time with family and friends.
- **Communicate Openly:** Keep the lines of communication open with your children, and encourage them to express their feelings, concerns, and ideas. Listen actively, validate their emotions, and work together to find solutions to any challenges that arise.

Smart tips for Homework Assignments:

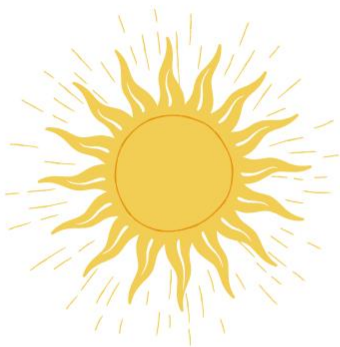
- **Originality of the work will be appreciated.**
- **Schedule your time for activities so that there is no piling up for the last moment.**
- **Read the instructions for each subject carefully.**
- **Holiday Homework is a part of subject enrichment and will be assessed as per the given parameters.**
- **A beautiful handwriting makes a good impression. Submit your work neatly.**
- **Parents are requested to only guide their children while doing their assignments.**
- **Please maintain the quality of work done.**
- **Present your assignments creatively**

Rubrics to assess Holiday Assignments:

Content	Presentation	Relevance	Creativity	Originality	On-time Submission
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Let us all feel the summer vibes with a poem written by 'Christina Rossetti' ...

SUMMER EMBRACE



In the golden glow of a sun-kissed day,
Summer arrives in its splendid display.
School doors close, and children cheer,
As vacation whispers, "The time is here!"

No more pencils, no more books,
Just endless days with curious looks.
From sandy shores to mountain peaks,
Adventure awaits, with no time to be meek.

Underneath a cerulean sky so vast,
Memories are made, moments that last.
Splashing in rivers, climbing trees,
Chasing fireflies in the evening breeze.

Ice cream cones and lemonade stands,
Footprints left in soft, warm sands.
Picnics in parks, laughter in the air,
Summer vacation, beyond compare.

From dawn till dusk, and into the night,
The world is ours, an endless delight.
With friends by our side, and dreams in our heart,
Summer's embrace, never to depart.

So, let's dance in the sun, and sing with glee,
For summer vacation sets us free.
In this season of joy, let's make our stand,
Embracing the magic of sun-kissed land.



Happy
holidays

Wishing all of you a very joyful, safe and fun packed summer break.
Happy Holidays!

Best Regards
Ms. Neelu Sharma
Principal

Sustainability is the ability to exist and develop without depleting natural resources for the future.

Dear Students,

In the broadest sense, sustainability refers to the ability to maintain or support a process continuously over time. The United Nations defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It assumes that resources are finite, and so should be used conservatively and carefully to ensure that there is enough for future generations, without decreasing present quality of life. A sustainable society must be socially

responsible, focussing on environmental protection and dynamic equilibrium in human and natural systems. The concept of sustainability is composed of three pillars: environmental, social and economic—also known informally as profits, planet, and people.



The United Nations Sustainable Development Agenda, adopted in 2015, includes seventeen Sustainable Development Goals (SDGs) to be achieved by 2030. Countries around the world have committed to taking action to meet these goals, such as making energy clean and affordable, stopping global warming, ending hunger and poverty, and creating sustainable cities and communities. The SDGs are universal goals for all people and are inherently global in nature. Learning about these initiatives helps you develop insights into critical issues around the world.

SUSTAINABLE DEVELOPMENT GOALS



This homework is a way to encourage you to be an active participant in your local and global communities to solve the biggest challenges the world faces today. We want you to understand the unique challenges faced by the communities all over the world that they may not have known about before. It is about better protecting the natural foundations of life and our planet everywhere and for everyone and preserving people's opportunities to live in dignity and prosperity across generations.

A series of topic integrated subject-wise home-based activities are devised for you and given below along with the instructions.

ENGLISH

READ AND WRITE:

1. Read the chapter Sonam Wangchuk in Main Coursebook and try Question C3 on Page 166.
2. Read this interesting article <https://shorturl.at/pxyKX>
3. Watch these interesting videos on Sonam Wangchuk and his efforts to save the Himalayas
4. Link : <https://shorturl.at/uJQU6>
5. Link : <https://shorturl.at/chpGN>
6. Write a **formal letter** to Sonam Wangchuk appreciating his efforts to provide water during summers. Write what you understood by the science he used behind ice stupas and if he has inspired you by his determination and perseverance. ***The best written letter will be posted on his social media handles after approval from school.***
7. FUN QUESTION : Does Sonam remind you of any movie character who invents extraordinary things using basic material? Read the chapter to jog your memory!



A member of the Chilean Nilus Project in front of an ice stupa while on a research trip to the Ladakh region of India. (Rosa Oyarzún, provided by Kristina Lyons)

CREATIVITY UNLEASHED:

1. Create a **FLIP BOOK** OR a **POP UP BOOK** on sustainability.

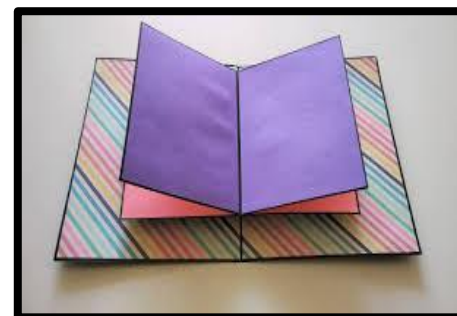
Instructions are given below:

- ❖ FLIP BOOK IDEAS :

<https://www.youtube.com/watch?v=wEp3KprCkuk>

- ❖ POP UP BOOK IDEAS :

<https://www.youtube.com/watch?v=1YdQQFW4fS8>



2. Visit the websites listed below for the words for the books:

- ❖ <https://sustainable.org.nz/learn/tools-resources/glossary-of-sustainability/>

- ❖ https://nidm.gov.in/PDF/Disaster_terminology.pdf

3. The creative books should have a minimum of 15 words related to disaster management, sustainability, and saving environment. Word meanings / description should also be mentioned neatly along with the word.

INDIAN STATE CONNECT: HARYANA AND MANIPUR

Imagine you go on a road trip to any one of these two states of Manipur or Haryana in your holidays.

Create an online postcard that represents the beauty and magnificence of the state. Send the postcard to your friend / family member / teacher describing in less than 60 words about your holiday.

Select a tagline and picture that matches the state you have selected. Visit the site given below for editable postcards. Upload / Turn in the postcard on your MICROSOFT TEAMS handle.

<https://www.template.net/editable/postcards>

<https://www.canva.com/postcards/templates/holiday/>



HINDI सतत विकास लक्ष्य



सतत विकास की अवधारणा की व्याख्या कई अलग-अलग तरीकों से की जा सकती है, लेकिन इसके मूल में विकास का एक दृष्टिकोण है जो एक समाज के रूप में हमारे सामने आने वाली पर्यावरणीय, सामाजिक और आर्थिक सीमाओं के बारे में जागरूकता के खिलाफ अलग-अलग और अक्सर प्रतिस्पर्धी जरूरतों को संतुलित करता है। अक्सर, व्यापक या भविष्य के प्रभावों पर पूरी तरह से विचार किए बिना, विकास एक विशेष आवश्यकता से प्रेरित होता है। हम पहले से ही देख रहे हैं कि इस तरह के दृष्टिकोण से गैर-जिम्मेदार बैंकिंग के कारण होने वाले बड़े पैमाने पर वित्तीय संकट से लेकर जीवाश्म ईंधन-आधारित ऊर्जा स्रोतों पर हमारी निर्भरता के परिणामस्वरूप वैश्विक जलवायु में बदलाव हो सकता है। हम जितना अधिक समय तक अस्थिर विकास करते रहेंगे, इसके परिणाम उतने ही अधिक बार और गंभीर होने की संभावना है, यही कारण है कि हमें अब कार्रवाई करने की आवश्यकता है।

1. वृक्षहीन धरती कैसी होगी? इस बात की कल्पना करते हुए पर्यावरण संरक्षण के लिए वृक्षों की उपयोगिता बताते हुए चित्र सहित स्लोगन लिखिए।
2. धरती पर लुप्त होते जा रहे जीव – जंतुओं में से किसी एक का चित्र A4 Size Sheet पर बनाते हुए बताएँ कि उन्हें कैसे बचाया जा सकता है?
3. कबीर दास जी का चित्र बनाते हुए A4 Size Sheet पर दोहे लिखिए।

MATH

General Guidelines for Students:

1. Your project needs to have a cover page, introduction, content and conclusion.
2. Clearly mention all the parts/ sections of your summer holiday homework.
3. Presentation carries marks.
4. Do proper online survey, wherever required.

(Part A)

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.



The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.

6th Goal SDGs is Clean water and Sanitation

- a) Collect the data of safe % of drinking water in Haryana, Utter Pradesh, Panjab and Manipur and represent the data through the bar graph.
- b) Collect the data for sanitary condition of these states and represent the data through the pie graph.



(Part B)

Activity:

1. Verify that sum of four angles of quadrilateral is 360 degrees.
2. Read an article on Sustainability with more than 50 words. Collect data about number of times vowels (a, e, i, o, u) came in that article. Represent the data in a bar graph.
3. Complete the Grid by following the direction of arrows

The grid contains the following operations and directions:

- Row 1: $12 \xrightarrow{+3}$, $\xrightarrow{+7}$, $\xleftarrow{+6}$, $\xleftarrow{+6}$, $\xrightarrow{-4}$
- Row 2: $\xrightarrow{-4}$, $\xrightarrow{+4}$, $\xrightarrow{\times 5}$, $\xrightarrow{+3}$, $\xrightarrow{-7}$, $\xrightarrow{+3}$, $\xrightarrow{+8}$, $\xrightarrow{+3}$
- Row 3: $\xleftarrow{+3}$, $\xrightarrow{+4}$, $\xrightarrow{-5}$, $\xrightarrow{+5}$, $\xrightarrow{\times 1}$, $\xleftarrow{+4}$
- Row 4: $\xrightarrow{\times 7}$, $\xrightarrow{-4}$, $\xrightarrow{\times 2}$, $\xrightarrow{+9}$, $\xrightarrow{+8}$
- Row 5: $\xleftarrow{+6}$, $\xrightarrow{+9}$, $\xrightarrow{-3}$, $\xrightarrow{\times 5}$, $\xrightarrow{\times 4}$, $\xleftarrow{-8}$
- Row 6: $\xrightarrow{\times 2}$, $\xrightarrow{+3}$, $\xleftarrow{-3}$, $\xrightarrow{\times 2}$, $\xrightarrow{-8}$, $\xrightarrow{\times 7}$
- Row 7: $\xrightarrow{+7}$, $\xrightarrow{\times 8}$, $\xrightarrow{\times 3}$, $\xrightarrow{-3}$, $\xrightarrow{+6}$, $\xleftarrow{+2}$
- Row 8: $\xleftarrow{-4}$, $\xrightarrow{+8}$, $\xrightarrow{\times 9}$, $\xleftarrow{-3}$, $\xleftarrow{\times 6}$, $\xrightarrow{+4}$

Where to do : In A4 size sheet

(Part C)

1. NCERT BOOK : Do all examples of Ch 1, 2,3
2. Do 10 questions daily on a separate notebook from ncert exemplar or from reference books like RD Sharma or RS Aggarwal.
Topics: Rational Numbers
Linear Equations in One Variable
Data Handling

Where to do: In practice notebook

SCIENCE

Activity-1

Metamorphosis for Sustainability: Transformative Innovations Revolutionizing Waste Reduction Strategies

Sustainable waste management strategies are evolving rapidly, driven by advancements aimed at prolonging the lifespan of materials and minimizing the volume of waste destined for landfills or incineration. Following groundbreaking developments have catalysed a significant reduction in waste generation, paving the way for a more environmentally conscious approach to waste management.

Research and investigate for the following advancements and make a detailed report on **any two topics** on the pointers mentioned.

a) Biofuel

Biofuel, any fuel that is derived from biomass—that is, plant or algae material or animal waste. Since such feedstock material can be replenished readily, biofuel is considered to be a source of renewable energy, unlike fossil fuels such as petroleum, coal, and natural gas. Research and make a detailed report on the following pointers mentioned below:

- i. How is biofuel produced?
- ii. How are biofuels classified?
- iii. Where are the uses of biofuels?
- iv. What is the impact of Biofuels on greenhouse gas emissions?
- v. What are the advantages and disadvantages of biofuel?



b) Plastic Roads- From trash to treasure

You may have seen bottles, bags, toys, and many other things made of plastic. But did you know that roads can be made of plastic too? That is right! These roads have become a great way to recycle plastic. Dr. Rajagopalan Vasudevan, an Indian scientist, introduced the idea of using waste plastic in road construction. Initially, Chennai was one of the few cities in the world to extensively use this technology. The municipality ordered the construction of 1000 kilometres of plastic roads in 2004. However, the effective use of plastic in road construction in India only began later in 2015 when the Union Government instructed the use of waste plastic with hot mixes. This combination was to be used for bitumen (a thick and black adhesive liquid) roads surrounding the metro areas. Dr Vasudevan is famously known as the Plastic Man of India and rightly so. In 2018, he was also honoured with highest civilian honour.



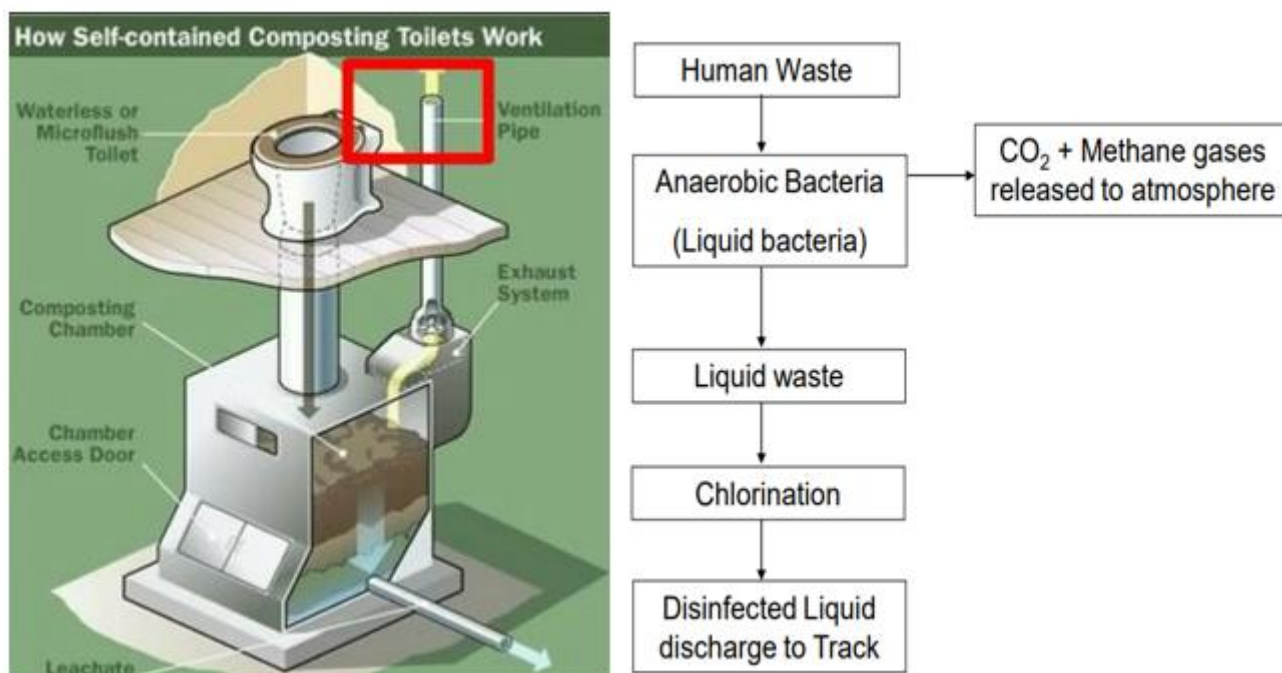
Research and make a detailed report on the following pointers mentioned below:

- i. Name the award Dr Vasudevan was honoured with.
- ii. What are the advantages of plastic roads as described by Dr Vasudevan?
- iii. How are plastic roads eco-friendly?
- iv. Are plastic roads successful?
- v. What is the source and properties of bitumen?
- vi. Give a Comprehensive Overview of the pros & cons of plastic roads.

c) Bio-toilet

Railways have taken several necessary steps so far to eliminate the dirt on the railway tracks and keep the platform clean. One of the most important initiatives in this regard is the installation of Bio-toilets in trains.

“Bio-Toilet project” of Indian Railways is an innovative & indigenous development of technology. This technology is first of its kind being used by any railroad in the world for On-board accelerated digestion of human waste; beginning with the introduction of 57 bio-toilets in one train i.e. Gwalior-Varanasi Bundelkhand Express in January 2011. It uses a bio-digester, which is total maintenance-free system, which does not require any sewage system. In the Swachh Bharat Mission launched by Prime Minister Narendra Modi, bio-toilets in trains have an essential role. In 2013, the Comptroller and Auditor General (CAG) issued a report stating that around 4,000 tonnes of sewage fall on the railway track per day from the toilets of trains alone, which is equivalent to 497 trucks. To eliminate this, the Railways has accomplished the goal of installing bio-toilets in all trains.



Research and make a detailed report on the following pointers mentioned below:

- Which bacteria is used in bio-toilets?
- State the properties of the bacteria. How is it different from the bacteria present around us?
- What is the purpose of a bio-toilet?
- What is the end product of bio-toilet?

Activity-2

Model of a Solar Cooker

Solar energy for sustainable development is an amazing way to power your home while helping the environment. There are many benefits of solar energy for sustainable development. Solar energy is renewable, meaning it will never run out and doesn't produce harmful greenhouse gases.

As a part of this activity, experience making the simplest, safest, convenient, low-cost cooking appliance 'Solar Cooker' and apply the concepts of reflection read so far to understand it's working.



- a) Make a model of Box-Type Solar Cooker using easily available materials at home depicting its components, i.e., Black Box, Glass Cover, Plane Mirror reflector (you can make use of aluminium foil) and cooking containers. Research about the properties of materials used to make the various components of the solar cooker.
- b) We have read the principles of reflection of light in grade VII. Let us apply the concepts read and answer the following questions on A4 sheets with the help of well labelled ray diagrams.
- Explain the working of a solar cooker with the help of a well ray labelled diagram of a solar cooker having a plain mirror. Make a note on laws of reflection too.
 - Which type of curved mirror (concave/convex) can be used in the making of a solar cooker and why is this type of mirror used? Draw well labelled ray diagrams to justify your answer.
 - What are the advantages and disadvantages of the solar cooker?

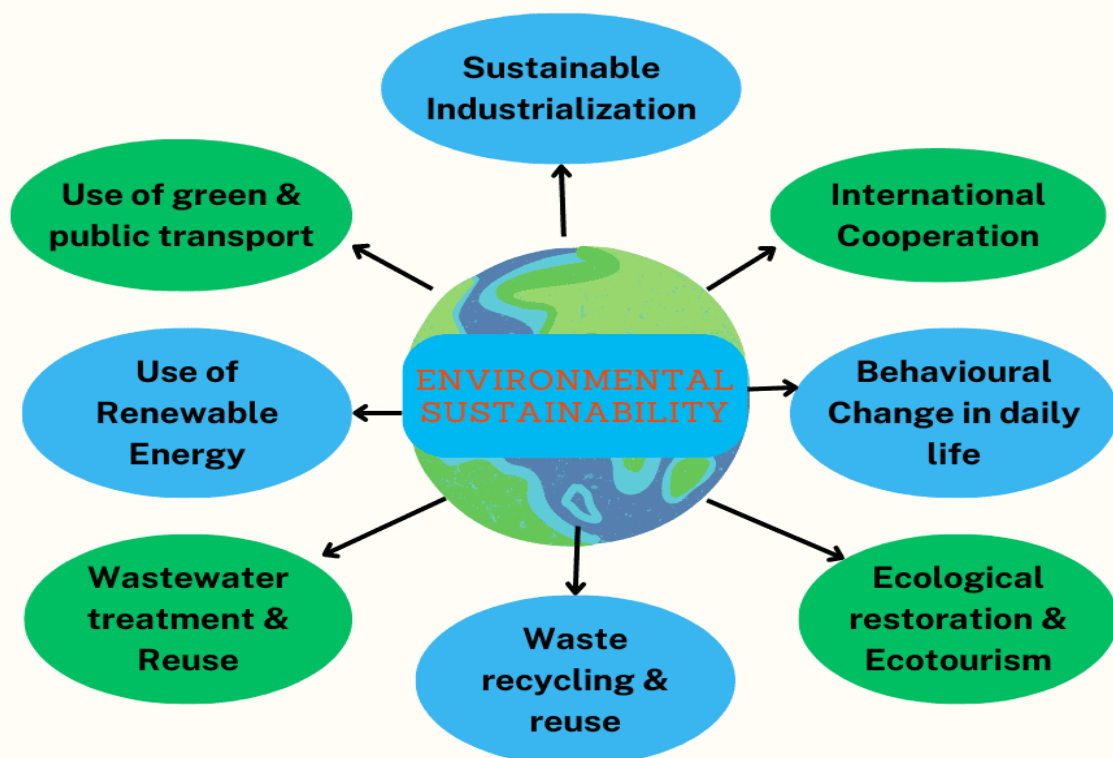
OR

Activity-3

Model of Sustainable City

A sustainable city reduces environmental impacts through its activities and promotes sustainable consumption and production patterns in accordance with its own territorial, geographical, social, economic and cultural conditions.

In this activity, you need to make a model of a sustainable city on a card board considering using easily available materials at home. A mind map on environmental sustainability has been given below for your reference.



SOCIAL SCIENCE

COMPULSORY PROJECTS:

Activities 1,2 & 3 are compulsory for all.

Activity 1: The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. Human rights are essential in achieving sustainable development that leaves no one behind and are central to all its three dimensions – social, environmental, and economic. This is reflected in the transformative ambition of the [2030 Agenda for Sustainable Development](#).



SDGs highlight upon “The Lazy Person’s guide to Saving the World”- United Nation Sustainable development. Using this information list the guidelines of saving the Earth and sketch any five goals of SDG’s.

Activity 2: Smart City Tag (SDG 11): On the political map of India, tag any five the smart cities under SDG goal.

Activity 3: - Affordable and Clean Energy (SDG 7):

Prepare a working model of a renewable energy such as solar energy or wind turbines to educate others about energy conservation and efficient use of resources.

Projects (As per the Roll Numbers): -

Roll No-1 to 12

Activity 4: - Responsible Consumption and Production (SDG 12):

Banners/ Placards to promote sustainable fashion to reduce single-use plastics in your school or community.

Roll No-13 to 24

Activity 4: - Peace, Justice, and Strong Institutions (SDG 16):

Make an Anchor Chart to illustrate international peacebuilding resolutions and advocate for human rights and access to justice for marginalized groups.

Roll No-25 to 37

Activity 4: Life Below Water (SDG 14): Conduct an Awareness Campaign to highlight the importance of Coral Reefs and Marine Ecosystems, while promoting River Clean up to Combat Plastic Pollution and Preserve Marine Life by creating and designing Engaging Educational Brochures and distributing these brochures to protect our oceans, preserve marine biodiversity, and ensure a sustainable future for all.

SANSKRIT

भूमिरापोऽनलो वायुः खं मनो बुद्धिरेव च।
अहङ्कार इतीयं मे भिन्ना प्रकृतिरष्टधा।।

- (1) प्राकृतिक संसाधनों जैसे शुद्ध हवा, शुद्ध पानी, मृदा, वन, खनिज और ईंधन आदि के महत्व को संस्कृत अनुच्छेद के माध्यम से चित्र सहित A3 सीट पर लिखिए।



- (2) भारत की संसद का चित्र बनाते हुए भारत के संविधान निर्माता 'भीमराव अंबेडकर जी' का संस्कृत में जीवन परिचय A3 सीट पर लिखिए।
- (3) एक रचनात्मक विज्ञापन के माध्यम से बेटी बचाओ बेटी पढ़ाओ को संस्कृत में दर्शाइए।

FRENCH

Durabilité

Dans un environnement qui change, il n'y a pas de plus grand risque que de rester immobile.

- Create or design a menu card for restaurant publicising balanced and healthy dishes with proper description of the dishes and nutrient in them in FRENCH language. Give a suitable name to your restaurant. The menu should be divided in different courses.

Ou

- Make a chart on "What steps have been taken for water conservation and SDG Goal 6 by these countries- INDIA, SRI LANKA, and SOUTH AFRICA." Paste the pictures and explain in 4-5 points for each country in French.
- Conjuguez les verbes dans le cahier: Avoir, aller, Finir, partir, boire, faire, connaître, savoir, vouloir et pouvoir.
- Ecrivez les prépositions (at least 10) et faites une phrase avec chaque préposition dans le cahier.



COMPUTERS

Machine learning (ML) is a type of artificial intelligence (AI) focused on building computer systems that learn from data. Machine Learning for Kids is a platform in which students can create their projects. In machine learning for kids, the students will train the machine.

Students need to create a project on Sustainability- (can take any one goal) using machine learning for kids' platform. Students can either use sound or images to train the machine. Once the project is complete the students can upload it on Microsoft Teams.

