



# DARBARI LAL D.A.V. MODEL SCHOOL

Accredited and permanently affiliated to CBSE  
BN-BLOCK, SHALIMAR BAGH, DELHI – 110 088

## CLASS – IX HOLIDAYS HOME WORK (2022 – 2023)

### ENGLISH

#### 1. BHASHA SANGAM ACTIVITIES:

- a) Write the alphabets of Gujarati language on an A-4 size sheet of paper.
- b) Learn and write how to greet others and introduce yourself in Gujarati language. (Use A4 sheets)

Prepare a small skit in Gujarati language or folk dance of Gujarat (group activity)

#### 2. PROJECT FILE: Create a biography on the eminent personality assigned according to your roll no.:

- a) Evelyn Glennie (Roll No. 1 – 10)
- b) Ustad Bismillah Khan (11 – 20)
- c) Albert Einstein (21 – 30)
- d) Maria Sharapova (31 – 40)
- e) Santosh Yadav (41 – 50)

Points to be included in the Biography: Family, historical background, Struggles and achievements, contributions etc.

#### 3. WORKBOOK: Students have to solve all the exercises for practice as concepts have already been covered in previous classes.

4. Read all the chapters (prose and poetry) from both the books – Beehive and Moments. While reading, underline the new words and find their meanings.

**Please Note: Home Work will be duly evaluated and exhibited on the Language Day so do justice with the task assigned**

### HINDI

सभी कार्य दिए गए निर्देशानुसार कीजिए-

#### PPT निर्माण कार्य

विषय - महिला सशक्तिकरण

- \* निम्नलिखित क्षेत्रों से संबंधित एक एक महिला पर विस्तृत जानकारी दीजिए-
- \* जानकारी में ध्यान रखने योग्य बिंदु (नाम, जन्म, पारिवारिक पृष्ठभूमि, शिक्षा, कार्यक्षेत्र, उपलब्धियां आदि)
- \* राजनीति
- \* खेल
- \* अंतरिक्ष
- \* पर्वतारोहण
- \* कला

**नोट - PPT के पहले पृष्ठ पर छात्र PPT का विषय, अपना नाम, कक्षा, विषय अध्यापिका का नाम लिखेंगे।**

PPT निर्माण के उपरांत अपनी अध्यापिका के निर्देशानुसार इससे गूगल क्लासरूम में पोस्ट कीजिए।

इसी पी.पी.टी. का प्रिंटआउट लेकर उसकी फाइल तैयार कीजिए।



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### चित्र सहित नारा लेखन

- \* सभी छात्र अपने विभाग के अनुसार दिए गए विषय पर एक-एक नारा चित्र सहित बनाएंगे।
- \* यह कार्य आप a4 साइज शीट पर करेंगे।
  - 9A – पर्यावरण, साक्षरता
  - 9B – जल संरक्षण, वृक्षारोपण
  - 9C – बेटी पढ़ाओ, बेटी बचाओ। मेरा विद्यालय मेरा अभिमान।
  - 9D – मातृभाषा हिंदी, विज्ञान का महत्व
  - 9E – हिंदी दिवस, प्रदूषण से बचाव
  - 9F – स्वच्छ भारत, देश भक्ति
  - 9G – ऊर्जा संरक्षण, कोरोना से बचाव
- \* पी.पी.टी निर्माण तथा नारा लेखन का कार्य सुंदर तथा आकर्षक होना चाहिए।
- \* PT1 परीक्षा के अंतर्गत आने वाले सभी पाठों के प्रश्न उत्तर याद कीजिए तथा व्याकरण का अभ्यास कीजिए।
- \* देश भक्ति, आत्मविश्वास तथा मानवता विषयों से संबंधित एक-एक कविता याद कीजिए तथा उसकी ऑडियो रिकॉर्डिंग कीजिए।
- \* विभिन्न चैनलों पर दिखाए जाने वाले हिंदी समाचार देखिए तथा समाचार वाचकों की तरह समाचार वाचन का अभ्यास कीजिए।

## SANSKRIT

### मणिका भाग 1

- कक्षा में पठित पाठों की पुनरावृत्ति करें।
- प्रथमसत्र के सभी शब्द रूप व धातुरूप स्मरण करें।

### रचनात्मक कार्य

- पाठ 1 – 'अविवेकः परमापदां पदम्'- इस पाठ की कथा का ए 4 साइज शीट पर सचित्र , सुन्दर लेखन करें।
- 'विद्या' से सम्बन्धित कोई पाँच श्लोक अथवा सूक्तियाँ सचित्र संस्कृत में ए 4 साइज शीट पर लिखिए।

### नोटः -

उपरोक्त कार्य का मूल्यांकन कर अंक प्रदान किए जाएँगे।



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### MATHS

#### General Instructions:

- Make a handmade folder (using eco-friendly material) of A4 sheet size and name it as 'Maths Portfolio'.
- All work is to be done in this folder only.
- Art integration Activity/Experiential learning Activity to be done on A4 size sheet.

1) Factorize the following Polynomials and paste their factors in the space provided using colorful sticky notes. Example is provided at the end of this activity.

i)  $2y^3 + y^2 - 2y - 1$

--	--	--

ii)  $\frac{x^2}{4} - \frac{y^2}{4}$

--	--

iii)  $(1 + 3y)^2 + 9y^2 - 1$

--	--

iv)  $2x^2 - 7x - 15$

--	--

v)  $x^3 + x^2 - 4x - 4$

--	--	--

vi)  $a^3 - 2\sqrt{2}b^3$

--	--

vii)  $84 - 2r - 2r^2$

--	--	--

viii)  $(2p - q)^3 + (q - 3r)^3 + (3r - 2p)^3$

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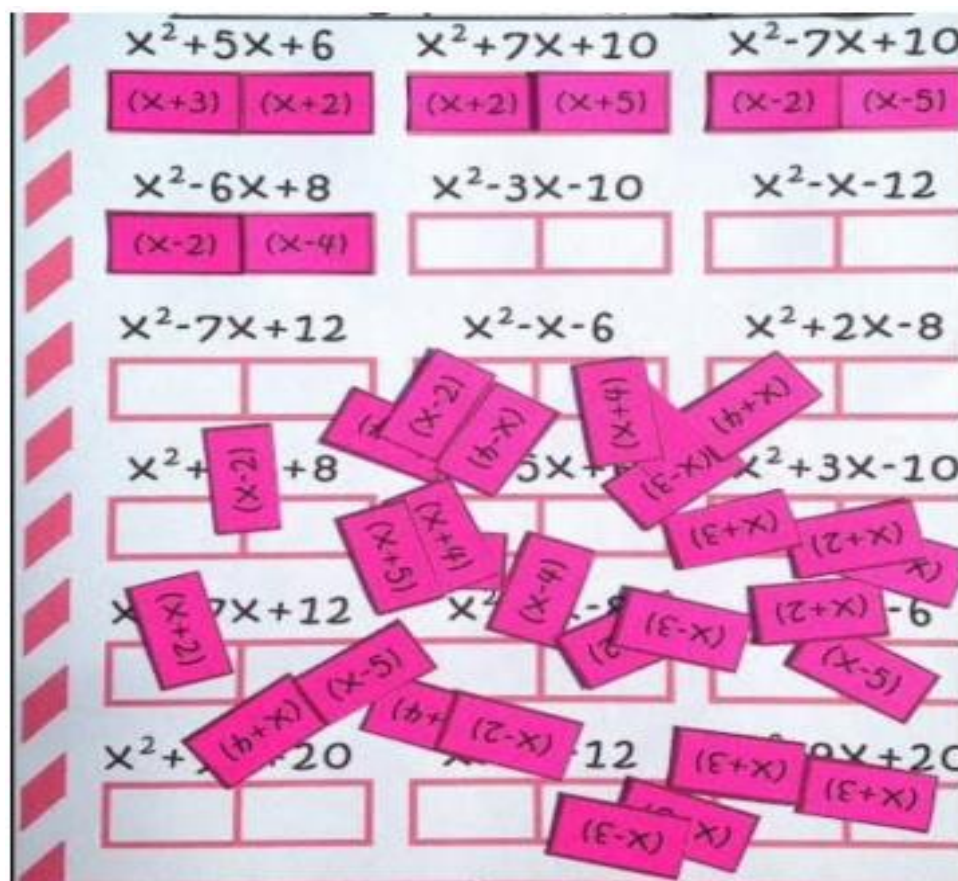
ix)  $9y^2 - 66yz + 121z^2$

--	--

x)  $x^3 - 6x^2 + 11x - 6$

--	--	--

**EXAMPLE :**



### 2) Group activity

The programme "Ek Bharat Shreshtha Bharat" was initiated to celebrate the spirit of national integration. "Bhasha Sangam" marks the unique symphony of languages of our country and is an expression of our shared dreams, hopes and aspirations for one India.

India's richness is marked by her cultural, ethnic and linguistic diversity.

### MATHEMATICAL RANGOLI:

Rangoli is a Sanskrit word which means "a creative expression of art through the use of colour".

Rangoli, is present in different forms all over India and is known by different names in different parts of the country.



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Rangoli art is known by the following names in different states:

• Alpana (West Bengal)	{Roll nos. 1, 10, 19, 28, 37, 46}
• Arian (Bihar)	{Roll nos. 2, 11, 20, 29, 38, 47}
• Aipan (Uttarakhand)	{Roll nos. 3, 12, 21, 30, 39, 48}
• Jhoti or Chita (Orissa)	{Roll nos. 4, 13, 22, 31, 40, 49}
• Kolam (Tamil Nadu)	{Roll nos. 5, 14, 23, 32, 41, 50}
• Muggu (Andhra Pradesh)	{Roll nos. 6, 15, 24, 33, 42}
• Madana (Rajasthan)	{Roll nos. 7, 16, 25, 34, 43}
• Rangoli (Gujarat, Karnataka and Maharashtra)	{Roll nos. 8, 17, 26, 35, 44}
• Chowkpurana (Uttar Pradesh)	{Roll nos. 9, 18, 27, 36, 45}

**Aim :** To inculcate awareness about the beautiful art form RANGOLI of different states and the mathematical concepts used in it.

### Content of project should be :

- 1) Cover Page.
- 2) Aim :
  - A) Importance of Bhasha sangam activity.
  - B)
    - 1) Definition of Mathematical Rangoli.
    - 2) Make a Rangoli (of a state allotted to you) on a graph sheet paper with 5 points marked on it and complete the following table :
- 3)

S. No.	Coordinates	Abscissa	Ordinate	Axis/Quadrant
1				
- 4) Make Same Colourful Rangoli on white square sheet and paste A4 size sheet with its name and welcome written on it in that language.
- 5) Mathematical concept used in designing of Rangoli (any 2 points).
- 6) Conclusion.

**RUBRICS :** Presentation  
Uniqueness Originality  
Finishing Elements of Composition.

- 3) Revise the syllabus done in the class.



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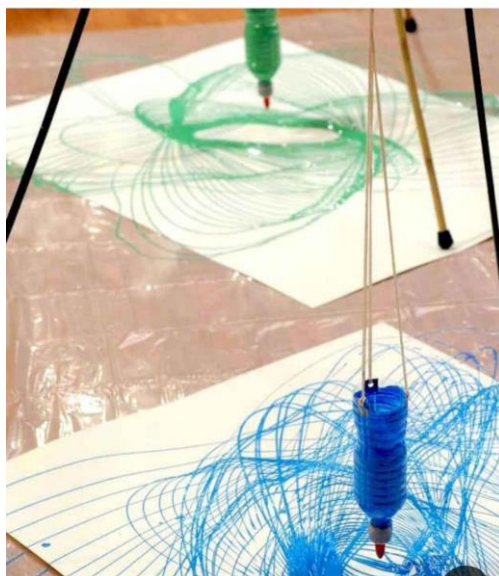
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## CLASS – IX HOLIDAYS HOME WORK (2022 – 2023)

### SCIENCE & TECHNOLOGY

#### PHYSICS:

Students this summer vacation we will start with a creative solution. You have to make a painting but the method to paint is different. The pic of the paintings and the video link through which you can learn how to make this painting is given below.



[https://youtu.be/2EakwIVrX\\_Q](https://youtu.be/2EakwIVrX_Q)

- You will enjoy creating this unique painting.
  - Now you have to relate this with Physics.
  - You will learn about the forces of motion and gravity with this new painting technique by exchanging the paint brush for a swinging pendulum.
  - A pendulum is a fixed object hung from a point so it can swing freely back and forth due to the force of gravity.
  - Based on the activity answer these questions
    - What pattern is the pendulum making with the paint?
    - What happens if you swing the pendulum gently or swing it more forcefully?
    - What type of motion is represented by this simple pendulum?
    - What will be the change in the pattern if you double the length of the pendulum?
- ( Do this activity on A4 size sheet)

**OR**

Read the famous story of THIRSTY CROW. Don't laugh. Now imagine yourself as a crow and place yourself as a thirsty crow. Do as the crow has done in the story and then relate this with the Physics.

Material required for this activity is - A pot, Water, few pebbles of equal size. Based on the activity answer the following questions

- Why does the pebble sink in the water?
  - What will happen if we use cork instead of pebble?
  - Instead of dropping many small pebbles, what if we were to gently drop one big stone into the pot?
  - Instead of pebbles drop any other objects available to you and note down your observations.
- (To be done on A4 size sheet)





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### CHEMISTRY:

One of the nice ways of getting students to think about chemistry, especially at introductory levels, is to have them present on something topical that can be related to their core chemistry. Students if you're a fan of the idea of promoting science through art. Then gear up and put your thinking caps on.....

- A. Your task is to create a four-panel brochure that highlights the important information about the “THREE TYPES OF SOLUTIONS”. The brochure must be colorful, neat, and contain the following required information:
- \* Take half a cartridge sheet.
  - \* The first panel should be on ‘CHEMISTRY POSTER’.
  - \* The rest three panels should include (The names of three solutions, their characteristics, images with examples etc.)
- B. Make a video of yourself while showing all the properties (type of mixture, appearance, stability, filtration and tyndall effect etc.) of the three types of solutions and share it with your respective subject teacher.
- C. Design an animation video by using POWTOON/CANVA APPLICATION on the applications of solutions in day today life.

### BIOLOGY:

Recycling and Reusing the valuable waste materials can result in the development of fantastic and usable products. Rather than putting these waste materials into landfills, various innovative and creative ideas can be put together to bring something new and useful. In order to achieve this objective students will make 3D Model of

Plant tissue ( any one)

OR

Animal tissue( any one)

Using various biodegradable materials.

## SOCIAL SCIENCE

### HISTORY

ART INTEGRATION

THE FRENCH REVOLUTION

1. Reading political symbols
2. Identify the symbols which stand for LIBERTY, EQUALITY and FRATERNITY.

**Instructions:** Students are required to draw the pictures related to the topic on A3 size colored sheets and write a few lines related to the topic.



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### POLITICAL SCIENCE

Art integration

- Five states of India have undergone Assembly Elections- Goa, Manipur, Punjab, Uttar Pradesh and Uttarakhand
- Choose Any One state of your choice and make a colourful Scrapbook on A4 size sheets
- The project should cover the following topics:
  - a. Name of the state- it's map
  - b. Party of your choice- it's symbol
  - c. Popular slogans- in Hindi, English or regional language.
  - d. Manifesto of the party
  - e. Face of the party
  - f. Results of the election
  - g. Reason for the defeat/ victory of the party

### **Instructions**

- The project should be made on eco-friendly A4 size sheets.
- All content be written with hand
- No plastic cover

### HISTORY

Forest society and colonialism

- Students to make a newspaper covering the following points.
  - Conditions of the Indian forest during Colonial rule.
  - State of Indian forest in the present day
  - Any one movement related to the forest- for example: Chipko, Gudem Hills movement
  - Famous Indian forest
  - Need to conserve forests
  - steps taken by the government to conserve the forest
  - Role of the students in conserving and preserving the forest

### Instructions:

- Take chart paper and fold it vertically to make a newspaper.
- Newspapers should be colourful and attractive.
- All content to be handwritten
- Paste colourful pictures

### GEOGRAPHY

#### **DISASTER MANAGEMENT PROJECT**

Prepare a project on disaster management. Choose one topic from the following according to your roll number.

**Select any one for your project.**

- Earthquake (Roll no 1-5)
- Cyclones (Roll no 6-10)





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- Flood (Roll no 11-15)
- Drought (Roll no 16-20)
- Landslides (Roll no 21-25)
- Nuclear accidents (Roll no 26-30)
- Chemical and industrial accidents (Roll no 31-35)
- Biological disasters (Roll no 36-till last roll no)

**Your project will start with the following points-**

- Definition of 'Disaster'
- What is disaster management?
- What are the types of disasters?
- What is a hazard?
- Differentiate between hazard and disaster
- Based on your selection of a disaster according to your roll number, explain its **Meaning, Causes, Do's and Don'ts, Prevention and mitigation measures, Latest means of forecasting disasters.**

### Instructions

The distribution of marks over different aspects of the project is as follows

S. No.	ASPECTS	MARKS
a	Content accuracy, originality and analysis	4
b	Presentation and creativity	4
c	Viva Voce	2

- Prepare the project in a simple handmade folder
- Project should be handwritten on plain A4 size sheets
- Project should have at least 15-20 pages
- Credit will be awarded to original drawings, illustrations and creative use of eco-friendly material.
- The project report should be developed and presented in the following order-

**Cover page** showing project title, student information, school and year

**Acknowledgement**

**Index** (Containing 3 columns- Sr.No. , Topic, Page No.)

**Content** with relevant headings

**Bibliography** should have the title, author, publisher and if a website the name of the website with the specific website link which has been used.

### ECONOMICS

**'Green revolution has transformed the face of Indian agriculture'**. Collect information on what was green revolution and the various positive as well as negative impacts it had on Indian agriculture. Also collect the data on production of wheat in India from 1965-1975 and represent this data collected with the help of bar diagram.

### ART EDUCATION

1. Make a poster on – 15<sup>th</sup> August celebrating Independence Day.
  - Size for poster is A3 size.
  - You can use oil pastel, mix medium or poster colour.

**OR**

2. Make a kite giving message on 15<sup>th</sup> august celebrating Independence Day.
  - Size – 15 by 15 inches
  - You can use poster colours or oil pastel colours.



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### MUSIC

Dear students during your vacations try to enhance your music buds!!! Let's prepare a patriotic song for \*Independence Day\* presentation. Song will be of your choice any Bollywood or non-Bollywood song will work. Record a video and share it with me during holidays so that I can guide you accordingly. Prepare well as we can have your presentation for 15<sup>th</sup> August celebration.  
Do complete your music files.

### PAINTING

- Make a poster on 15<sup>th</sup> August celebrating Independence Day.
- Size: A3 Size
- Medium: Oil Pastel Colours

### I.T.

#### **HHW I [5 marks]**

Following questions require you to think beyond the study material provided. So think, explore and enjoy learning new concepts!

(Do the following exercises in your digital IT notebook, insert a new page and give heading as *HOLIDAYS HOMEWORK*.)

#### **Q1. Write One Word in the following blanks using the Help box given**

Hard drive, RAM, Central processing unit, Motherboard, Power supply

- (a) The computer's main circuit board, connects directly or indirectly to every part of the computer- \_\_\_\_\_
- (b) This part is where your software, documents, and other files are stored- \_\_\_\_\_
- (c) This part is to carry out commands. Whenever you press a key, click the mouse, or start an application, you're sending instructions to this part - \_\_\_\_\_
- (d) This unit in a computer converts the power from the wall outlet to the type of power needed by the computer - \_\_\_\_\_
- (e) Whenever your computer performs calculations, it temporarily stores the data in this part until it is needed- \_\_\_\_\_

#### **Q2. Fill the following blanks appropriately using only two words (**HARDWARE, SOFTWARE**)-**

- (a) \_\_\_\_\_ is any part of your computer that has a physical structure.
- (b) \_\_\_\_\_ is any set of instructions that tells the structure what to do and how to do it.
- (c) You view your Holidays Home Work lesson in a web browser, which is a \_\_\_\_\_, and using your mouse, which is a \_\_\_\_\_ to click from page to page.



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### HHW II [10 marks]

Holidays are the time to explore & learn new things and here is the chance for you to enhance your digital skills!

Create a **digital collage** (A4 size) using any software (Canva/ Adobe Express/ Photoshop/ online apps) you are comfortable with. The collage should be made on any of the following topics –

1. the role and importance of ICT in personal life and at workplace
2. various ICT tools
3. different secondary storage devices
4. various output and input devices

Your collage will be marked on the parameters – creativity, originality, overall presentation

*Upload the collage in JPG format in your drive and paste its link in the IT links Google sheet posted in classroom under the heading 'Digital Collage'*

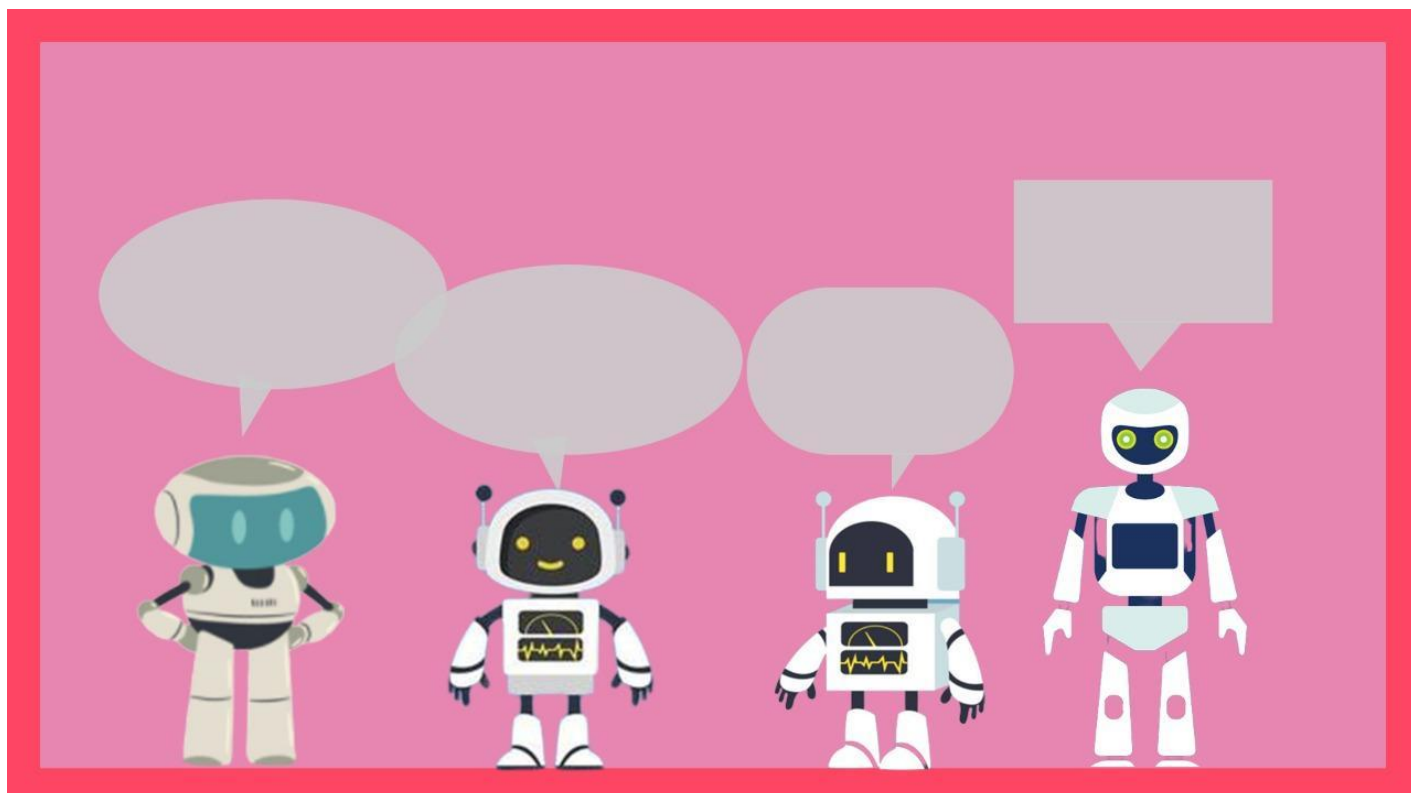
### Artificial Intelligence

***“Our intelligence is what makes us human, and AI is an extension of that quality.”***

– Yann LeCun, Professor, New York University

#### **Project 1:**

Imagine the conversation between these AI robots in the year 2030 and write down in the cloud speech bubbles.



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### Project 2:

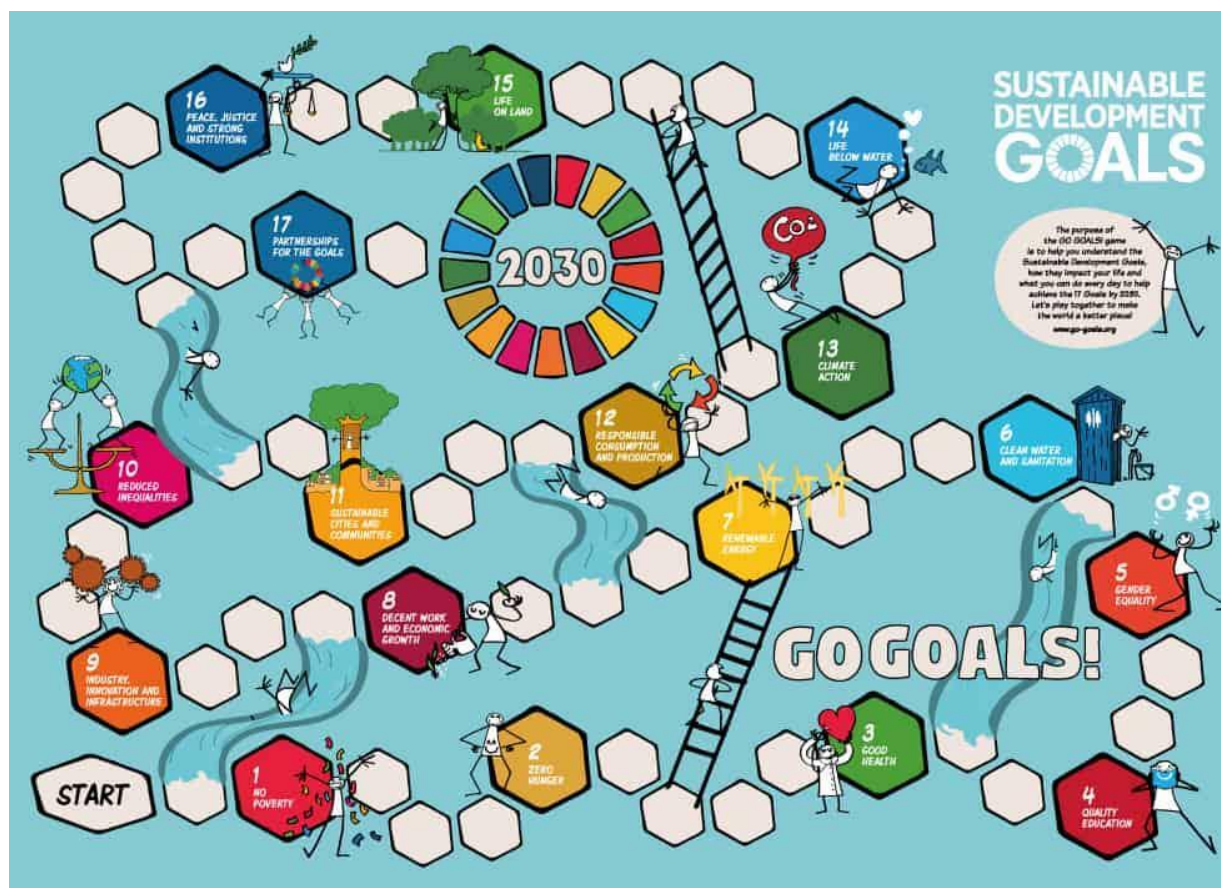
Make a 40 sec video wherein you give an idea on "Smart Home". Do it in pairs. Include following points in your video:

- Mention some smart devices with their utilities.
- How these smart devices have an impact on the environment.

This activity will also assess **Communication and Green Skills of Part-A.**

### Project 3:

To better understand the social issues, design a board game about the 17 Sustainable Development Goals (SDG's).



You can take reference from <https://go-goals.org>

**Note: HHW will carry 15 marks in Portfolio.**