



**DECEMBER  
2025**



# NEWSLETTER

**GOAL 13: TAKE URGENT ACTION TO  
COMBAT CLIMATE CHANGE & ITS  
IMPACTS**

**(Sustainable Development Goals)**



**JM INTERNATIONAL SCHOOL, DWARKA,  
DELHI**

# OVERVIEW OF SUSTAINABLE DEVELOPMENT GOALS

- The 70th Session of the UN General Assembly held on 25th September 2015 adopted the Sustainable Development Goals (SDGs) with 17 goals and 169 targets, under the official agenda “Transforming our world: the 2030 Agenda for Sustainable Development”. India is a signatory to this landmark agreement.



70 Session of UN General Assembly, New York , 25th Sept.2015

- Officially, the SDGs came into effect from 1st January 2016.
- Member Countries have the responsibility for follow-up and review the progress made in implementing the goals and targets.
- SDGs is an inter-governmentally agreed set of goals relating to international development which aims at meeting the needs of the present without compromising the ability of future generations to meet their own needs.

## 17 GOALS OF SDG



# WHAT IS GOAL 13

# CLIMATE ACTION

Sustainable Development Goal 13 (SDG 13) focuses on taking urgent action to combat climate change and its impacts. This goal aims to encourage collective action, integrate climate measures into policies and planning, and safeguard the environment for present

## WHY IT MATTERS?

**Environmental Protection:** Helps protect ecosystems, biodiversity, and natural resources from long-term damage caused by climate change.

**Human Health and Safety:** Reduces health risks associated with heatwaves, pollution, and climate-related diseases.

**Food and Water Security:** Supports sustainable agriculture and ensures the availability of clean water by minimizing climate-related disruptions.

**Disaster Risk Reduction:** Strengthens preparedness and resilience against floods, droughts, cyclones, and other extreme weather events.



## KEY MONITORING ASPECTS OF SDG 13 ?

**Greenhouse Gas Emissions:** Monitoring carbon dioxide and other greenhouse gas emissions to assess progress in reducing climate impact.

**Global Temperature Trends:** Tracking changes in average global and regional temperatures to understand climate patterns.

**Extreme Weather Events:** Recording the frequency and intensity of floods, droughts, heatwaves, and cyclones.

**Air Quality Levels:** Measuring pollutants such as CO<sub>2</sub>, PM2.5, and PM10 that contribute to climate change and health risks.

## SUCCESS STORIES

**Renewable Energy Expansion:** Many countries have significantly increased the use of solar and wind energy, reducing dependence on fossil fuels and lowering carbon emissions.

**Global Climate Agreements:** International initiatives like the Paris Agreement have brought nations together to commit to emission reduction and climate resilience efforts.

**Community-Led Climate Action:** Local communities and schools have successfully implemented waste reduction, water conservation, and awareness campaigns, inspiring sustainable lifestyles.

## WHAT ARE THE CHALLENGES FACED IN SDG 13?

**Rising Greenhouse Gas Emissions:** Continued dependence on fossil fuels leads to increased carbon emissions, accelerating global warming.

**Extreme Weather Events :** Frequent floods, droughts, heatwaves, and cyclones cause loss of life, property, and livelihoods.

**Limited Climate Awareness :** Lack access to innovative, eco-friendly technologies hampers efforts in resource efficiency.

**Financial Constraints:** Insufficient funding and resources hinder climate mitigation and adaptation initiatives, especially in developing regions

**Policy Implementation Gaps:** Weak enforcement of climate policies and regulations reduces their effectiveness.

**Technological Barriers:** Limited access to advanced

## LOOKING FORWARD

"Sustainability is not a choice; it's a responsibility to future generations."  
– Anonymous

## HOW CAN WE MAKE A DIFFERENCE?

**Reduce Carbon Footprint:** Use public transport, cycle, walk, and conserve electricity to lower greenhouse gas emissions.

**Adopt Renewable Energy:** Promote and use solar, wind, and other clean energy sources whenever possible.

**Practice Energy Conservation:** Switch off unused appliances, use energy-efficient devices, and reduce excessive energy consumption.

**Support Climate-Friendly Policies:** Encourage and support initiatives that focus on environmental protection and climate resilience.

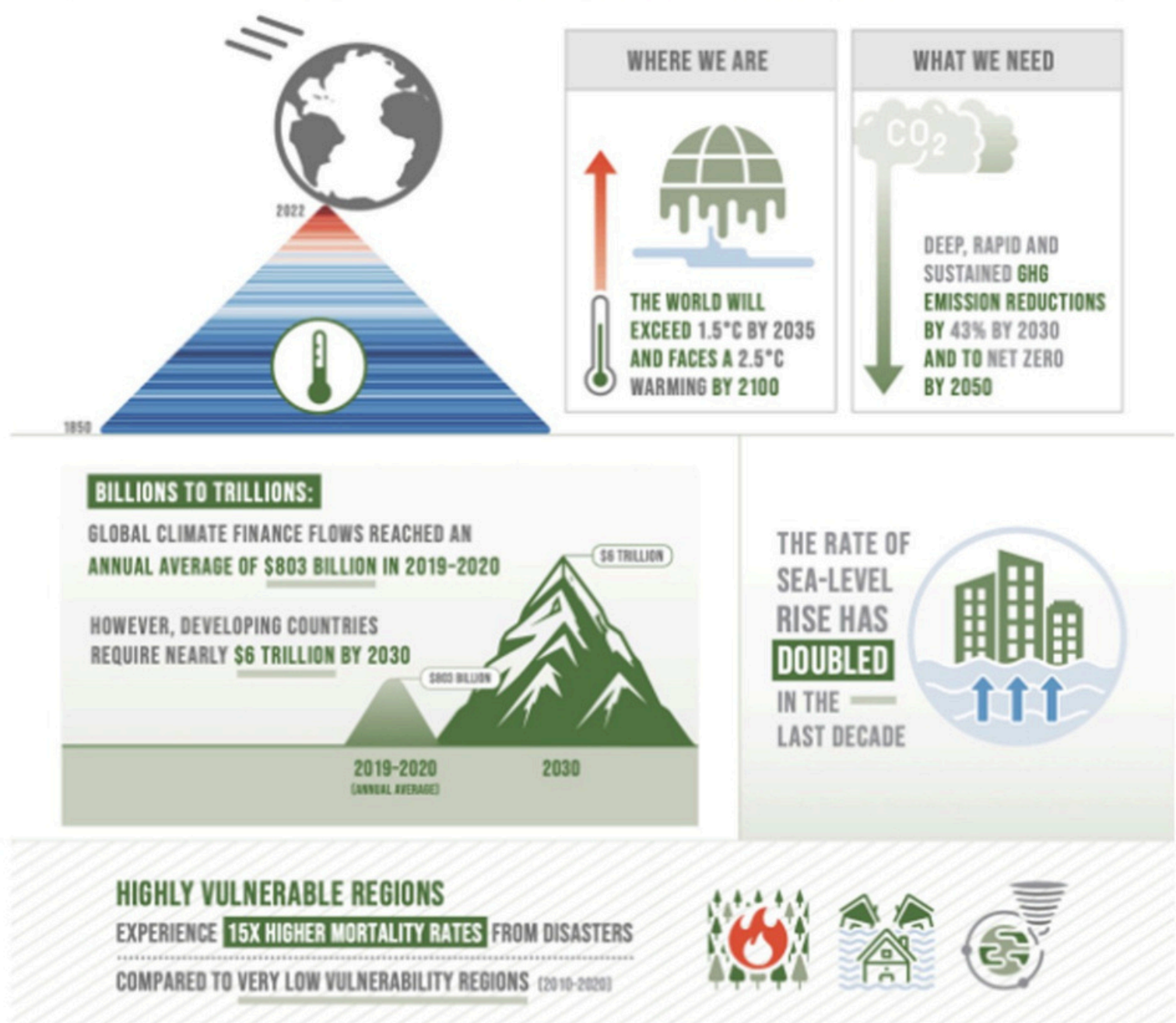
**Student and School Initiatives:** Participate in climate action projects, eco-clubs, and sustainability programs within schools.



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

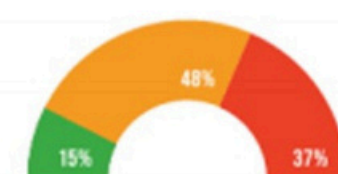
## EARTH'S TIPPING POINT

STANDING AT THE BRINK OF CLIMATE CALAMITY



## SDG PROGRESS UNVEILED: A DATA JOURNEY

A CONCERNING PICTURE OF SDG PROGRESS AT THE MIDPOINT:



BASED ON AN ASSESSMENT OF SDG TARGETS WITH TREND DATA.

SIGNIFICANT STRIDES IN SDG DATA AND MONITORING



MIND THE GAP FOR BETTER DATA

NATIONAL STATISTICAL OFFICES SATISFIED WITH THEIR COORDINATION ROLE



COUNTRIES WITH +60% FUNDING GAP IN THEIR STATISTICAL PROGRAMME



# HOW TO ACHIEVE SDGs

- A localized approach to address the unique challenges and opportunities present at the local level. By building a Local SDG Agenda tailored to gender equality, we can effectively target and implement initiatives that promote women's rights and empowerment.
- Creating an environment where multiple stakeholders—including civil society, private sector organizations, professional associations, and other agencies—actively participate in gender-focused initiatives is crucial. These collaborative efforts can drive meaningful change and ensure that diverse perspectives and resources contribute to gender equality.
- Conducting a situation assessment to identify development gaps and needs related to gender inequality is essential. By setting priorities at the local government and district levels, we can formulate targeted SDG-wise planning that addresses specific gender issues. Aligning existing budgets, schemes, and programs with relevant SDG 5 targets will further enhance our efforts to achieve gender equality in our state.



# ABOUT

## STEMROBO TECHNOLOGIES



**STEMROBO** provides 'End-To-End Solution to K-12 Schools' for 'Nurturing Innovation & 21st Century Skills' among young students of age 6-18 years across the globe. We offer young students an opportunity to explore, experience and bring innovation through a world class STEAM, Artificial Intelligence, Robotics & Coding curriculum integrated with our unique & affordable 'Technology Products and Solutions' delivered in an online or hybrid model; thereby enabling and empowering students to be able to become Creative - Thinkers and Problem - Solvers. Together, let's unlock the potential within each student, ignite a passion for Innovation, Creativity & Learning, and pave the way for a brighter tomorrow.

## IMPORTANCE OF STEM EDUCATION FOR KIDS

The term "STEM" typically refers to a group of academic disciplines that are focused on science, technology, engineering, and mathematics. It prepares them for the future by building problem-solving skills, encouraging curiosity and exploration, fostering collaboration and communication skills, and addressing global challenges that require STEM principles for their solution.



# STEMROBO TECHNOLOGIES

Innovation, Creativity & Learning

STEMROBO provides 'End-To-End Solution to K-12 Schools' for 'Nurturing Innovation & 21<sup>st</sup> Century Skills' among young students of age 6-18 years across the globe. We offer young students an opportunity to explore, experience and bring innovation through a world class **STEAM, Artificial Intelligence, Robotics & Coding** curriculum integrated with our unique & affordable 'Technology Products and Solutions' delivered in an online or hybrid model; thereby enabling and empowering students to be able to become **Creative - Thinkers and Problem - Solvers**.

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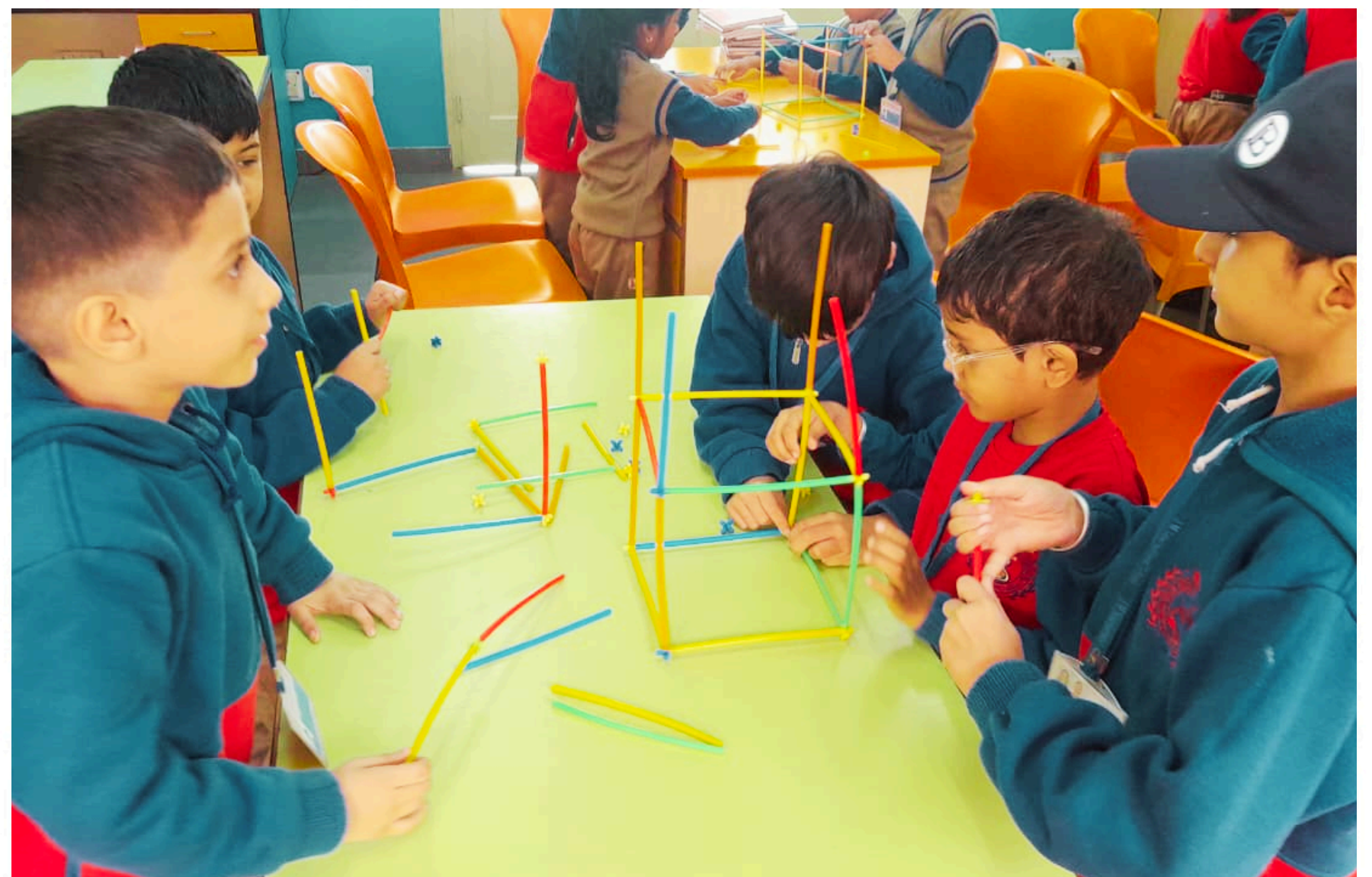
[www.stemrobo.com](http://www.stemrobo.com)

## Mission

Our mission is to build an ecosystem focused on leveraging technology in education where **STEAM, Robotics, Coding, Artificial Intelligence & AR/VR** are utilized as crucial tools for kids to become smart in their academics and be able to solve modern world problems.

## Vision

The company's vision is to nurture innovation and 21<sup>st</sup> century skills in K-12 students across the globe and prepare them for the future technological world. We are on a journey which will help every student to elevate core skills like **Logical Thinking, Creativity, Computational Thinking and Problem - Solving**.



# — DECEMBER 2025 —

## GLIMPSE OF ACTIVITIES

### Grade I – Revision of Kits (Linkage Box & Smart Circuit Kit)

Students revised the basic concepts using the Linkage Box and Smart Circuit Kit through hands-on activities. The session focused on understanding simple connections, components, and the flow of electricity in a fun and engaging way.

#### Activities Included:

##### Factory Activity – Linkage Box:

Students used the Linkage Box to create simple factory-style linkages. Through this activity, they learned how different mechanical parts connect and move together. It helped them understand cause-and-effect relationships and improved their motor skills and logical thinking.

##### Light Up a Bulb – Smart Circuit Kit:

Students used the Smart Circuit Kit to light up a bulb by making correct electrical connections. They learned about basic circuit components such as the battery, wires, and bulb, and understood the concept of a closed circuit through hands-on experimentation.



Renewable Energy Potential: Solar energy can power the entire world's electricity needs with just 0.3% of the Earth's land.

# — GLIMPSE OF — PROJECTS

## Grade II – Revision (Linkage Box & Smart Circuit Kit)

Students revised concepts using the Linkage Box and Smart Circuit Kit through engaging, hands-on activities. The focus was on strengthening their understanding of basic structures, simple mechanisms, and electrical connections.

### Activities Included:

#### Lantern Activity – Magic Straws (Linkage Box):

Students created a lantern structure using magic straws from the Linkage Box. This activity helped them understand basic construction, shape formation, and stability while improving creativity and fine motor skills.

#### Spin a Motor – Smart Circuit Kit:

Students used the Smart Circuit Kit to connect a battery and motor, making the motor spin. Through this activity, they learned about simple electrical circuits, energy flow, and how electrical energy is converted into mechanical motion.



Water Usage: Producing one hamburger requires approximately 2,500 liters of water.

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## GLIMPSE OF ACTIVITIES

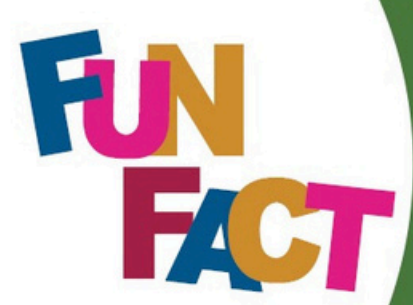
### Grade III – Revision (Smart Circuit Kit & Micro:bit MakeCode)

Students revised key STEM concepts through hands-on activities using the Smart Circuit Kit and Micro:bit with MakeCode. The session focused on understanding basic electrical circuits and introducing block-based coding with physical output.

#### Activities Included:

**Torch Light Activity – Smart Circuit Kit:** Students built a simple torch light by connecting a battery, switch, and LED using the Smart Circuit Kit. Through this activity, they learned about closed circuits, the function of switches, and safe handling of basic electronic components.

**Display Icons – Micro:bit (MakeCode):** Students used the Micro:bit and MakeCode platform to display icons on the LED matrix. This activity introduced them to block-based coding, sequencing, and how code controls hardware outputs, helping develop logical thinking and digital creativity.



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**Fashion Industry Impact: The fashion industry is responsible for 10% of global carbon emissions.**

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## GLIMPSE OF ACTIVITIES

### Grade IV – Revision (Smart Circuit Kit & Micro:bit MakeCode)

Students revised STEM concepts through practical activities using the Smart Circuit Kit and Micro:bit with MakeCode. The session focused on understanding sensor-based circuits and strengthening block-based coding skills.

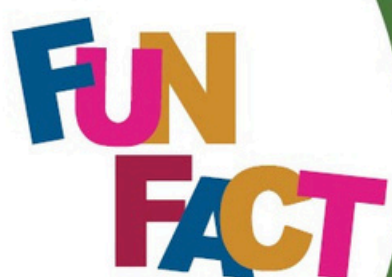
#### Activities Included:

#### Dark Room Safety Alarm – Smart Circuit Kit:

Students created a dark room safety alarm using the Smart Circuit Kit. They learned how sensors can detect changes in light levels and trigger an alarm, helping them understand basic safety systems and real-life applications of electronic circuits.

#### Clap Heart Activity – Micro:bit (MakeCode):

Students programmed the Micro:bit to display a heart icon when a clap sound was detected. Through this activity, they learned about sound input, event-based programming, and controlling LED outputs using block-based coding.



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The fashion industry is one of the world’s largest industries, influencing culture, economy, and employment while also being a major contributor to global pollution.

# — DECEMBER 2025 —

## GLIMPSE OF ACTIVITIES

### **Grade V – Revision (Micro:bit) & Introduction to Python Programming**

Students revised Micro:bit concepts and were introduced to the basics of Python programming. The session aimed to strengthen their understanding of input-output devices and provide a foundation in text-based coding.

#### **Activities Included:**

##### **Touch Heart Activity – Micro:bit:**

Students revised the Touch Heart activity by programming the Micro:bit to display a heart icon when the touch pin was pressed. Through this activity, they learned about touch inputs, conditional logic, and controlling LED outputs.

##### **Name Badge Activity – Micro:bit:**

Students created a digital name badge using the Micro:bit by displaying their names and icons on the LED matrix. This activity helped them understand sequencing, loops, and personalization using block-based code.

##### **Introduction to Python Programming Language:**

Students were introduced to the Python programming language. They learned basic concepts such as what Python is, where it is used, simple syntax, and how Python differs from block-based coding, preparing them for advanced coding in higher grades.



The fashion industry provides employment to over 300 million people worldwide, supporting livelihoods and driving creativity and economic growth.

# — DECEMBER 2025 —

## GLIMPSE OF ACTIVITIES

### Grade VI – Revision (Micro:bit MakeCode) & Python Programming

Students revised Micro:bit concepts and strengthened their understanding of block-based coding and text-based Python programming. The session focused on event handling, outputs, and basic Python commands.

#### Activities Included:

#### Clap Heart Activity – Micro:bit (MakeCode):

Students revised the Clap Heart activity by programming the Micro:bit to display a heart icon when a clap sound was detected. This helped them understand sound input, event-based logic, and controlling LED outputs using MakeCode.

#### Print Details Using Python:

Students learned how to print basic details using Python. Through simple programs, they understood the use of the print() function, text output, and basic syntax, helping them transition from block-based coding to text-based programming.



The fashion industry contributes over \$1.7 trillion to the global economy, making it a major driver of innovation, trade, and entrepreneurship worldwide.

# — DECEMBER 2025 —

## GLIMPSE OF ACTIVITIES

### Grade VII – Introduction to Python & AI Connect (Block Coding)

Students were introduced to Python programming using the AI Connect block-coding platform. The session focused on building logical thinking, understanding basic programming concepts, and performing simple mathematical operations through coding.

#### Activities Included:

##### Introduction to Python (AI Connect):

Students learned the basics of Python programming through block coding on the AI Connect platform. They were introduced to fundamental concepts such as variables, sequence of instructions, and logical flow, making the transition from block-based to text-based programming easier.

##### Find LCM Activity:

Students programmed logic to find the Least Common Multiple (LCM) of given numbers using Python block coding. Through this activity, they learned about loops, conditions, and mathematical reasoning.

##### Sum of Numbers Activity – Python Block Coding:

Students programmed a solution to calculate the sum of numbers using Python block coding. Through this activity, they learned about addition operations, loops, and logical reasoning in coding.



The fashion industry supports more than 75 million workers globally, with a growing shift toward sustainable and ethical fashion practices in recent years.

# — DECEMBER 2025 —

## GLIMPSE OF ACTIVITIES

### Grade VIII– Introduction to Python (AI Connect – Block Coding)

Students were introduced to Python programming using the AI Connect block-coding platform. The session focused on understanding basic programming concepts and applying logic to solve simple mathematical problems.

#### Activities Included:

##### Introduction to Python – AI Connect:

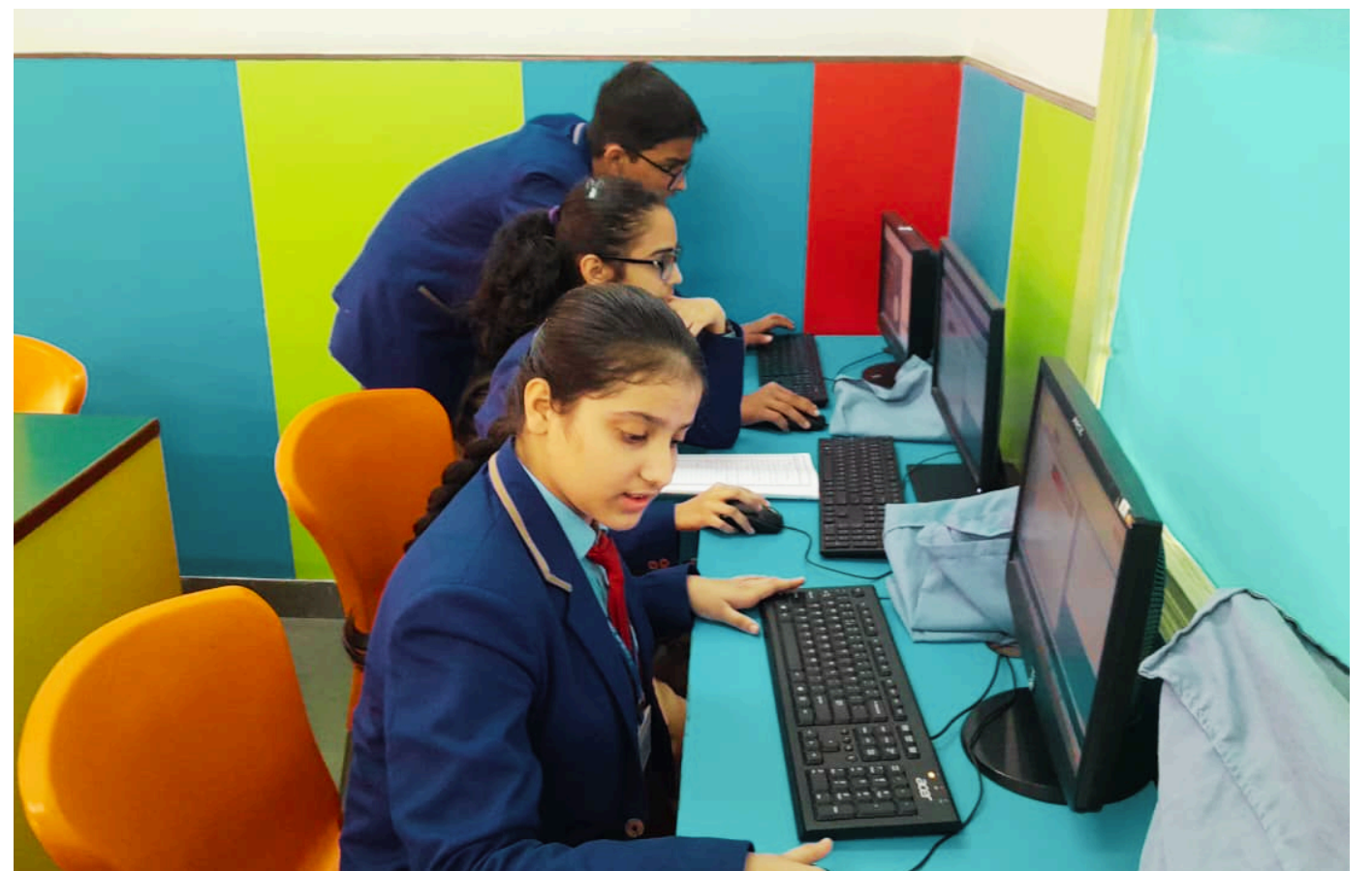
Students learned the basics of Python programming through block coding. They were introduced to fundamental concepts such as variables, sequencing, and logical flow, helping them build a strong foundation in coding.

##### Print Your Details Activity:

Students created programs to print their personal details using Python block coding. This activity helped them understand the use of output statements, text formatting, and program execution.

##### Print Table Activity – Python Block Coding:

Students created programs to print multiplication tables using Python block coding. This activity helped them understand loops, number operations, and structured program execution.



The fashion industry generates millions of small businesses worldwide, with over 60% of fashion brands classified as small or medium enterprises (SMEs), encouraging entrepreneurship and local innovation.



# THANK YOU



## **CONTACT US**

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