







JM INTERNATIONAL SCHOOL, DWARKA, DELHI





OVERVIEW OF



• 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.

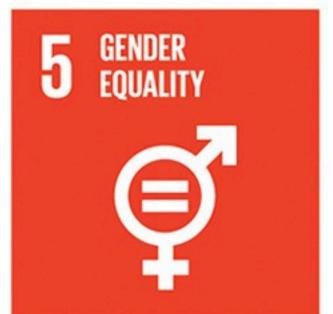
17 GOALS OF SDG





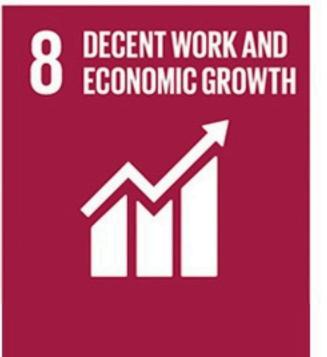








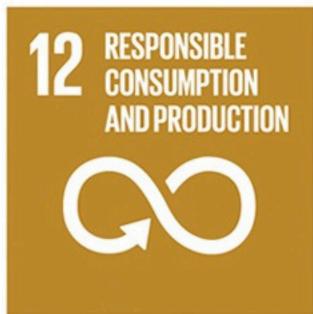








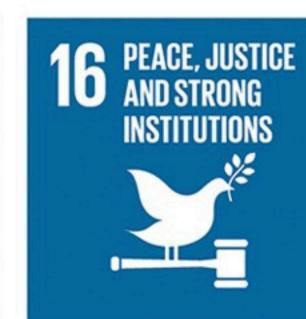


















Sustainable Development Goal 8 (SDG 8) focuses on promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. As the world rapidly changes due to technological advances, globalization, and climate challenges, achieving decent work and economic growth has become more critical than ever. This newsletter highlights the importance of SDG 8, shares global progress, and explores ways we can all contribute to a fairer and more prosperous future.

Through SDG 8, the UN aims to balance economic growth with social inclusion and environmental sustainability, ensuring that economic progress benefits everyone without compromising the well-being of future generations.

WHAT IS SDG 8?

SDG 8 is one of the 17 Sustainable Development Goals set by the United Nations to ensure a better, more sustainable world by 2030. It calls for sustained economic growth, higher levels of productivity, and technological innovation, but most importantly, it emphasizes that growth must be inclusive and provide decent employment opportunities for all, particularly for women, young people, and marginalized groups.

Key aspects of SDG 8 include:

- Promoting full employment for everyone, including young people and those with disabilities.
- Achieving equal pay for equal work, reducing gender-based wage gaps.
- Combating child labor and modern slavery.
- Fostering innovation to boost productivity and economic diversification.



GLOBAL PROGRESS:

While progress has been made in several areas, much more work is needed to ensure that economic growth translates into well-being for all. Some key developments include:

- Declining poverty rates in regions such as East Asia and the Pacific, driven by robust economic growth.
- Increased focus on improving workplace safety and reducing exploitation.
- Rising awareness about fair labor practices and the need for decent jobs in global supply chains.





WHAT ARE THE CHALLENGES FACED IN SDG 8?

- 1. The global unemployment rate remains high, especially for youth, with many still stuck in informal or precarious work conditions.
- 2. Gender inequalities in the workforce continue, with women often earning less than men and facing barriers to advancement.
- 3. The impact of climate change on jobs and economic stability is an emerging issue that requires urgent attention.



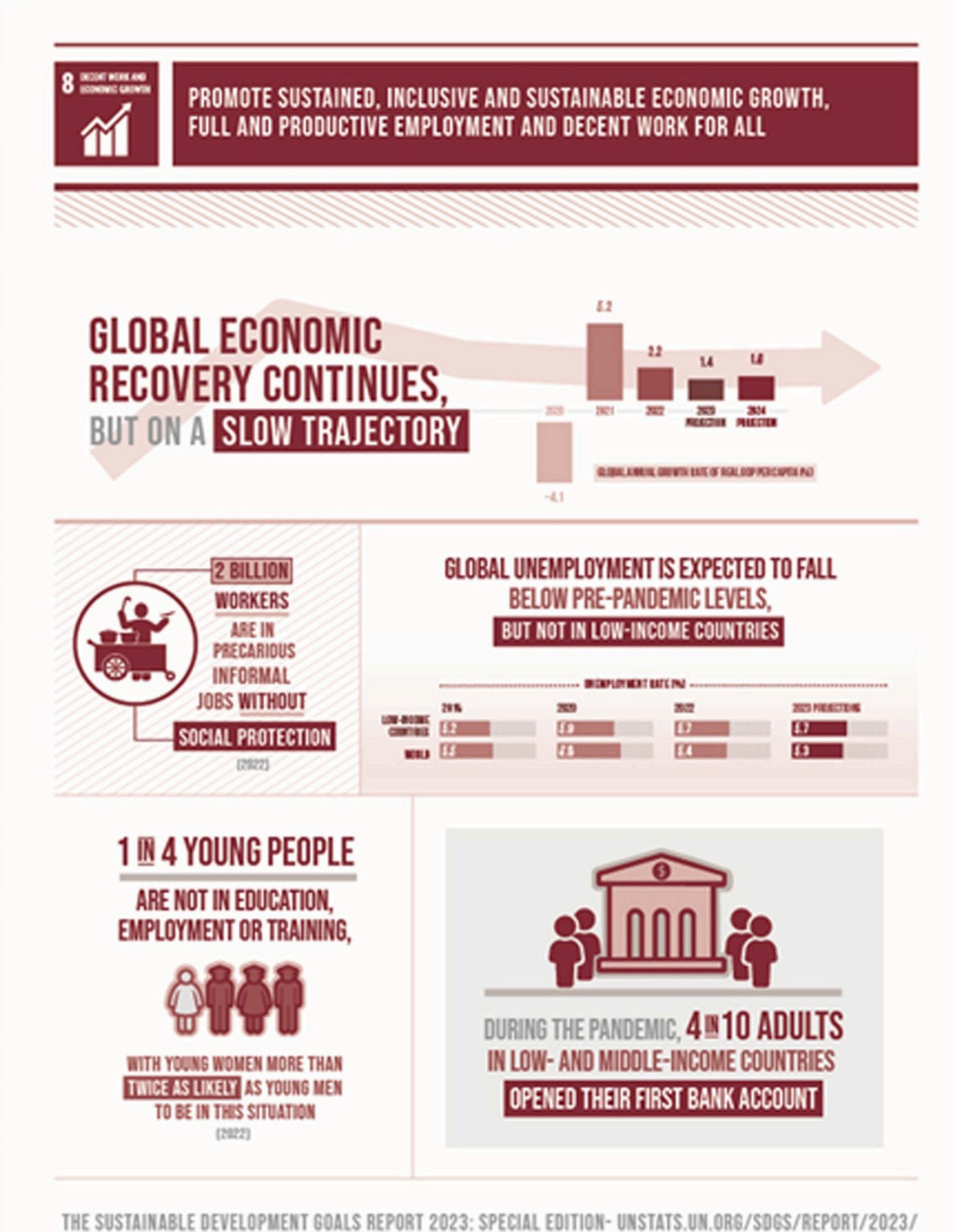
LOOKING FORWARD:

As we strive toward 2030, achieving SDG 8 will require collaboration between governments, businesses, and individuals. Economic growth is not just about GDP—it's about ensuring that all people, regardless of their background, can thrive in a safe and fair work environment. Let's work together to build a future where decent work and economic growth go hand in hand.

HOW CAN WE MAKE A DIFFERENCE?

Each of us has a role to play in supporting SDG 8 and contributing to decent work and economic growth:

- Support Fair Trade Products: Buying goods from brands that prioritize fair wages and ethical working conditions ensures that workers around the world are treated with dignity.
- Promote Skill Development: Advocate for and support education and vocational programs that help young people develop the skills needed for future jobs.
- Encourage Inclusive Hiring: Whether you're an employer or an employee, push for inclusive hiring practices in your workplace to give marginalized groups more opportunities.
- Support Policies That Promote Economic Growth: Be an advocate for policies that promote innovation, improve infrastructure, and foster sustainable industries.







Decent work and economic growth

2015-2019 Output, Impact, Collaboration

Research supporting SDG8 has grown since 2015, with a compound annual growth rate of 9.2% compared to nearly 3.5% for research in all fields.

The US produces the most research supporting SDG7, followed by China, the United Kingdom, Russia and Germany. Six of the 10 most prolific locations are high income locations (accounting for more than 37,000 publications); three are upper-middle income locations (China, Russia and Malaysia) and one is a lower-middle income location (India). No low income locations featured in the top 50.

The top five locations for which research on SDG8 represents the largest share of their research portfolio are Ghana, Zimbabwe, Nigeria, Kazakhstan and South Africa.

International collaboration yielded 21% of research on SDG8. High income locations collaborated with low income locations on 2% of their total SDG8 research, while nearly 58% of the related output from low income locations came from collaboration with high income locations.

As a measure of academic impact measured by citation, the field weighted citation impact (FWCI) for SBG8 research was above average every year, with an average of 1.14 over the period.







This analysis builds on Elsevier's Sustainability Science in a Global Landscape report, which was released in 2015 to coincide with the launch of the SDGs. See a 2017 update on key findings on the RELX SDG Resource Centre. Help us to provide insight into SDG research. Click here to review the research See the methodology and definitions

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Publications in period

Compound Annual Growth Rate in the period

61.0%

1.1%

Publications from high-income locations

Academic corporate collaboration

0.3%

Publications from low-income locations Field-Weighted

20.8%

Publications with international collaboration

Field-weighted citation impact is an indicator of scholarly impact based on the number of times the publication was cited in other research. An FWCI of above 1.0 indicates the impact is above the normalised average

9.2%

1.14

Citation Impact

What is FWC17



Key themes in SDG8 Research

Social Entrepreneurable Economic Development

Financial Development Tourism Unemployment

Social Entrepreneurable Economic Development

Financial Inclusion Ecotourism Microfinance continuess

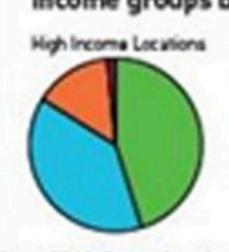
Economy Ecotourism Microfinance continuess

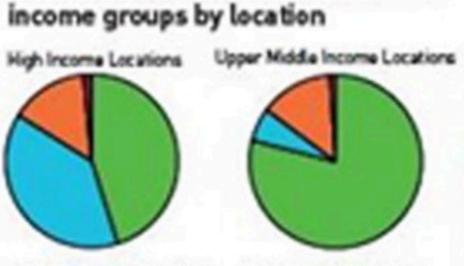
Social Inclusion Ecotourism Microfinance continuess

Economy Circular Economy Human Trafficing Small and Medium-si... Securia Efficiency Carbon Emission

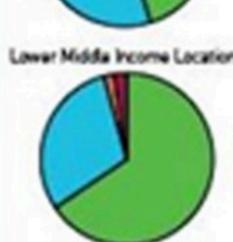
Spromounts Dealtomark Gross Domestic Product

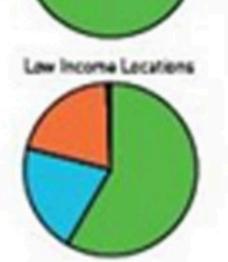
International collaboration between income groups by location



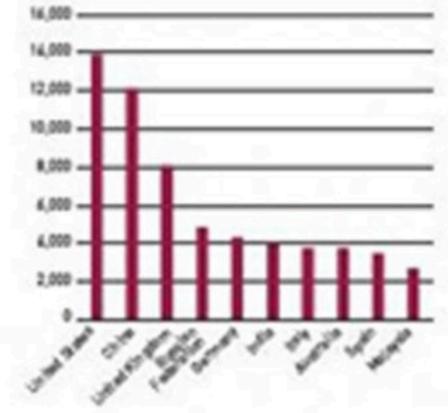






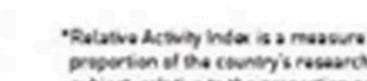


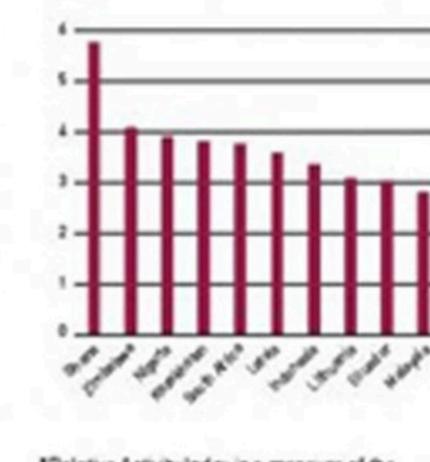
Top 10 locations by publication



International collaboration

and research impact

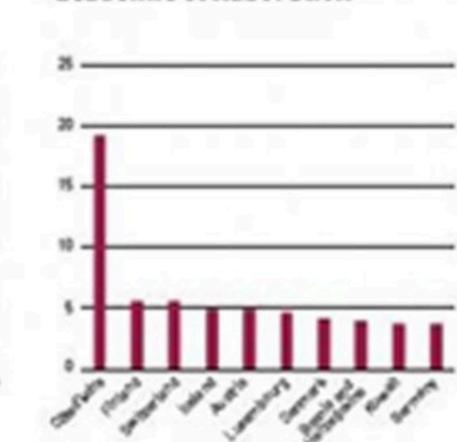




Top 10 locations by RAI

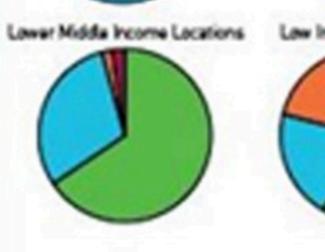
*[Relative Activity Index]

"Relative Activity Index is a measure of the Top 10 locations for corporateproportion of the country's research output in the academic collaboration subject, relative to the proportion seen globally



Volume of publications

supporting SDG8



Decent work and economic growth

Challenges

8 DECENT WORK AND ECONOMIC GROWTH

UNEMPLOYMENT is on the rise around



Solutions



International Cultaboration (NI

PROVIDE EMPLOYEMENT OPPORUNITIES AND DECENT WORK for women and men to eradicate poverty

Roughly HALF OF THE **WORLD** population still lives on \$2 PER DAY



CREATE GREEN JOBS to provide work for the 470 million who will be entering the labour market by 2030

Some economic activities directly or indirectly HARM THE ENVIRONMENT



PROMOTE GREEN **GROWTH AND**

JOBS contributing to restoring and protecting the environment and natural resources



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



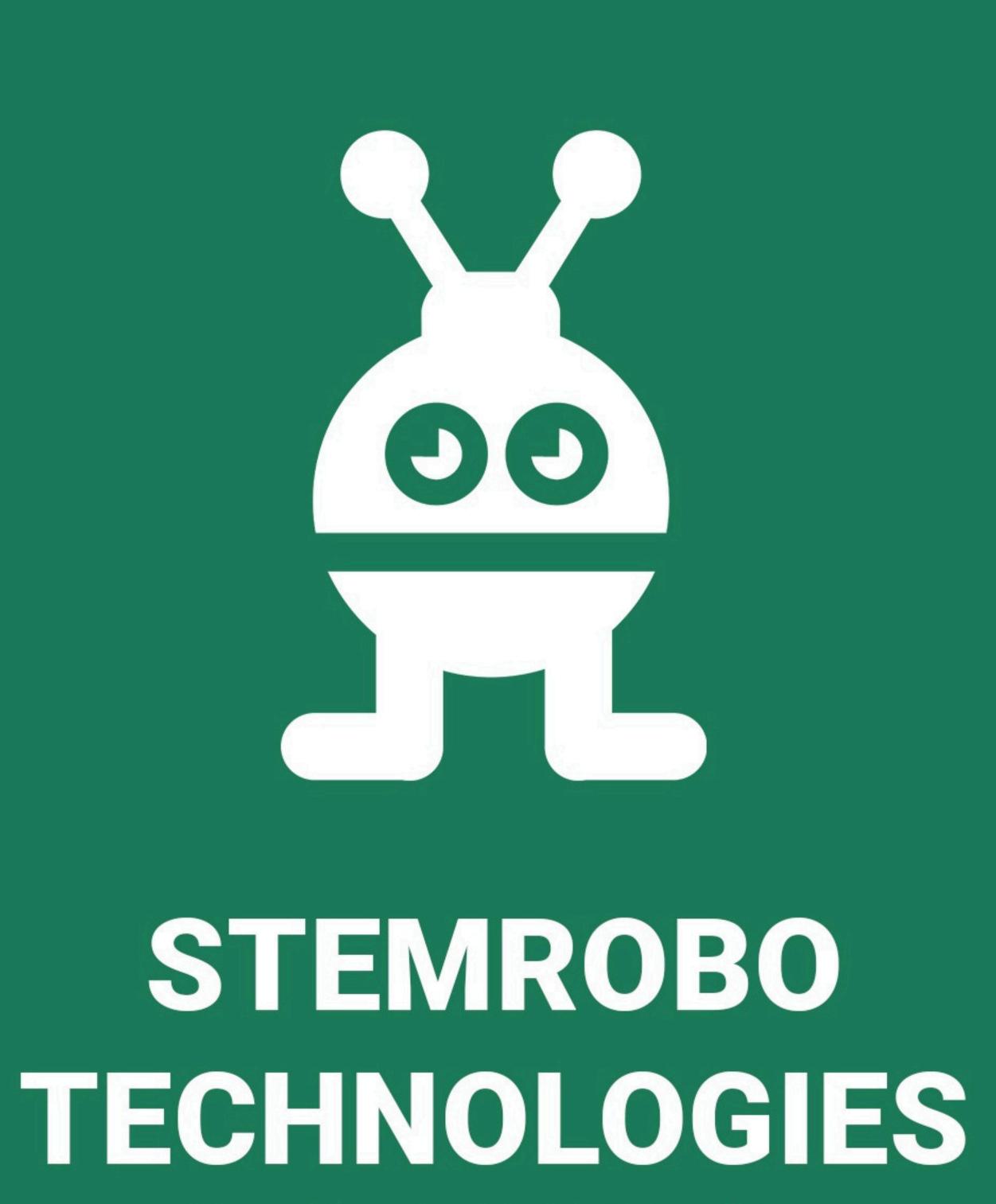
STEMROBO provides 'End-To-End Solution to K-12 Schools' for 'Nurturing Innovation & 21st Century Skills' among young students of age 6-18 years across the globe. We offer young students an opportunity to explore, experience and bring innovation through a world class STEAM, Artificial Intelligence, Robotics & 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 STEMEDUCATION 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.







Innovation, Creativity & Learning ———

STEMROBO 'End-To-End provides 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 ome Creative - Thinkers become **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.

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 21st 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**.









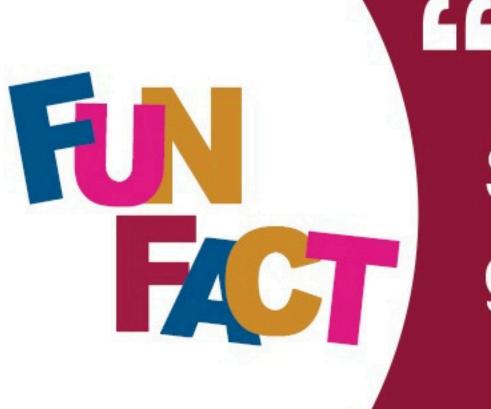
About

School Robotics Lab



The Robotics Lab is a dedicated workspace where students can learn, experiment, and transform their ideas into prototypes. Designed to foster creativity beyond rote learning, the lab encourages students to explore futuristic skills such as design and computational thinking, adaptive learning, and artificial intelligence.

Equipped with state-of-the-art tools and equipment like 3D printers, robotics kits, and electronic components, the Robotics Lab provides a hands-on learning experience in science, technology, engineering, and mathematics (STEM) fields. The primary goal is to cultivate problem-solving and critical thinking skills from an early age. By promoting experimentation and innovation, the lab aims to nurture the next generation of innovators and entrepreneurs, preparing them for future challenges and contributing to the overall development of India's technological landscape.



SDG 8 aims to create jobs for all, with a focus on sustainable and inclusive growth.





OCTOBER 2024 GLIMPSE OF ACTIVITIES

Grade I

Magic Straw Kit: The Magic Straw Kit encourages creativity and hands-on learning by allowing students to construct various 3D models using simple, flexible straws. It helps develop spatial awareness, problem-solving skills, and an understanding of structural design.

Activities:

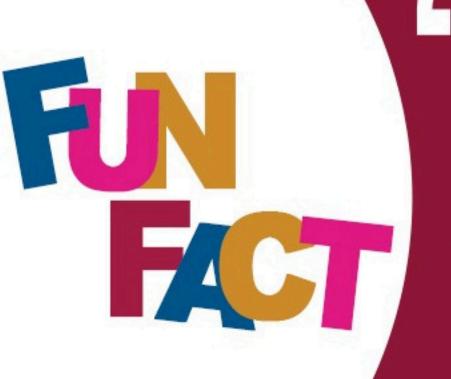
- Lantern: Shape and design.
- Box: Structure and stability.
- Kennel: Basic architecture concepts.
- Supermarket: Creativity and planning.











Did you know? Over 64 million young people are unemployed worldwide! SDG 8 focuses on empowering them with skills and opportunities.





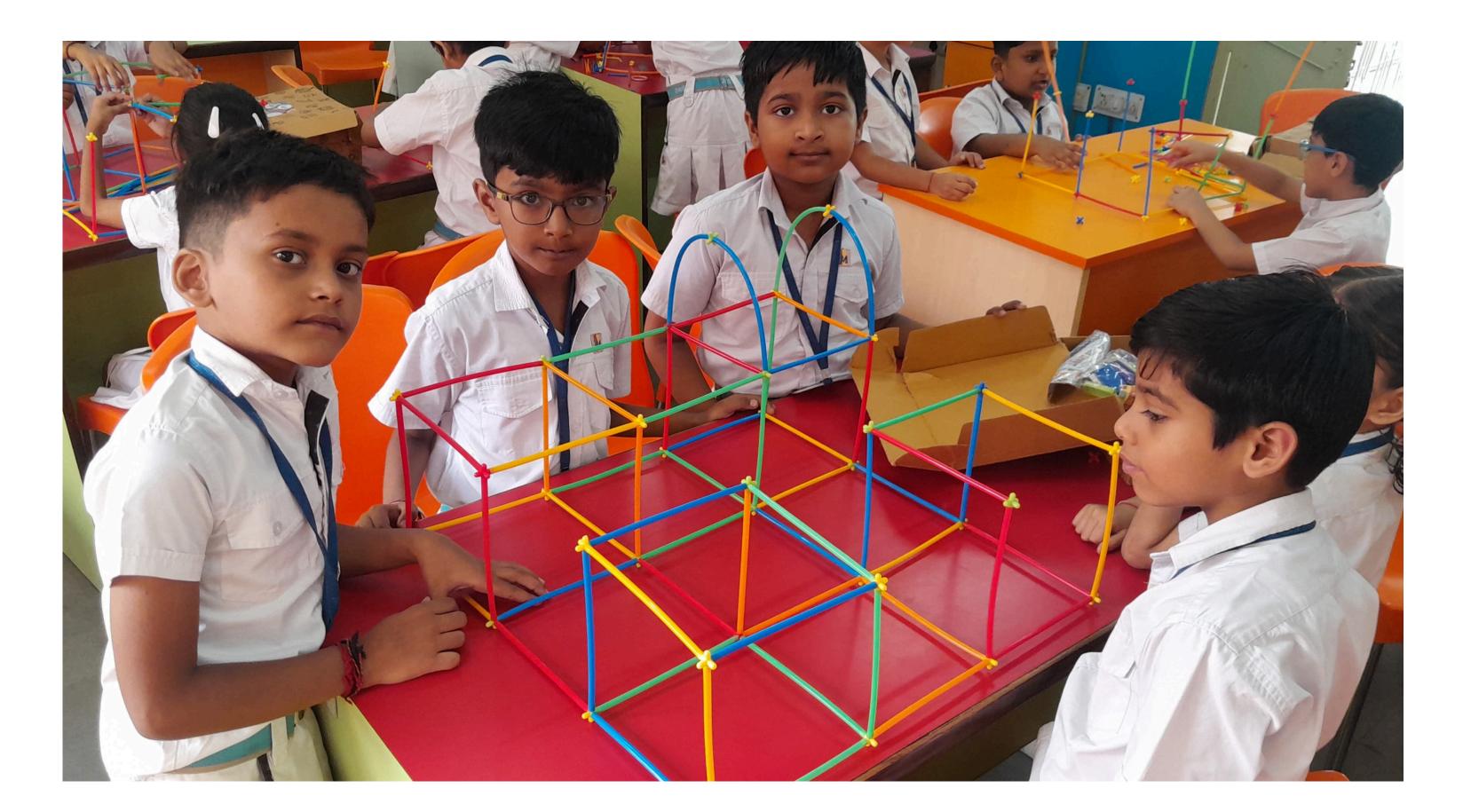
GLIMPSE OF ACTIVITIES

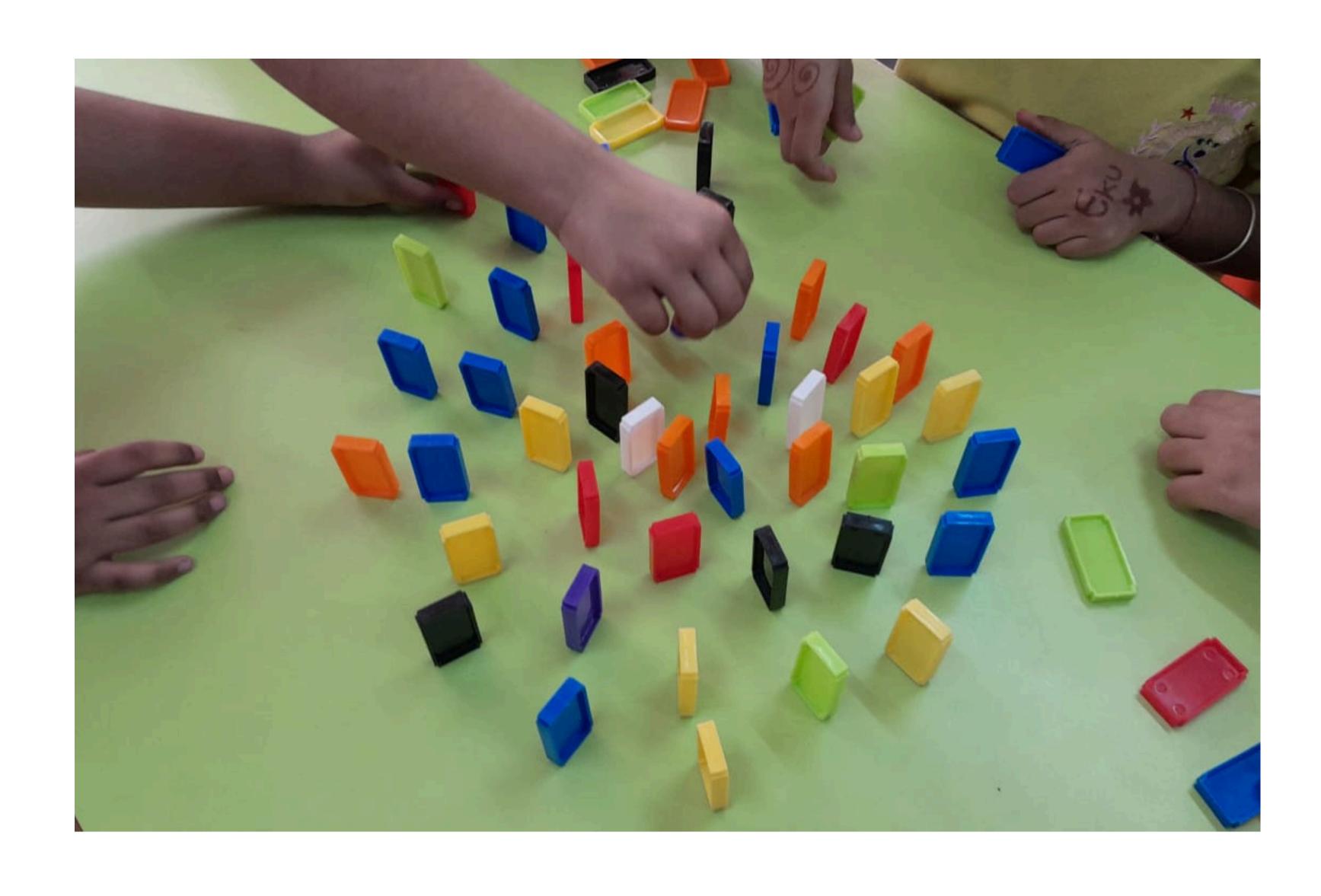
Grade II

Magic Straw Kit: The Magic Straw Kit encourages creativity and hands-on learning by allowing students to construct various 3D models using simple, flexible straws. It helps develop spatial awareness, problem-solving skills, and an understanding of structural design.



- Lantern: Shape and design.
- Box: Structure and stability.
- Kennel: Basic architecture concepts.
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GLIMPSE OF ACTIVITIES

Grade III

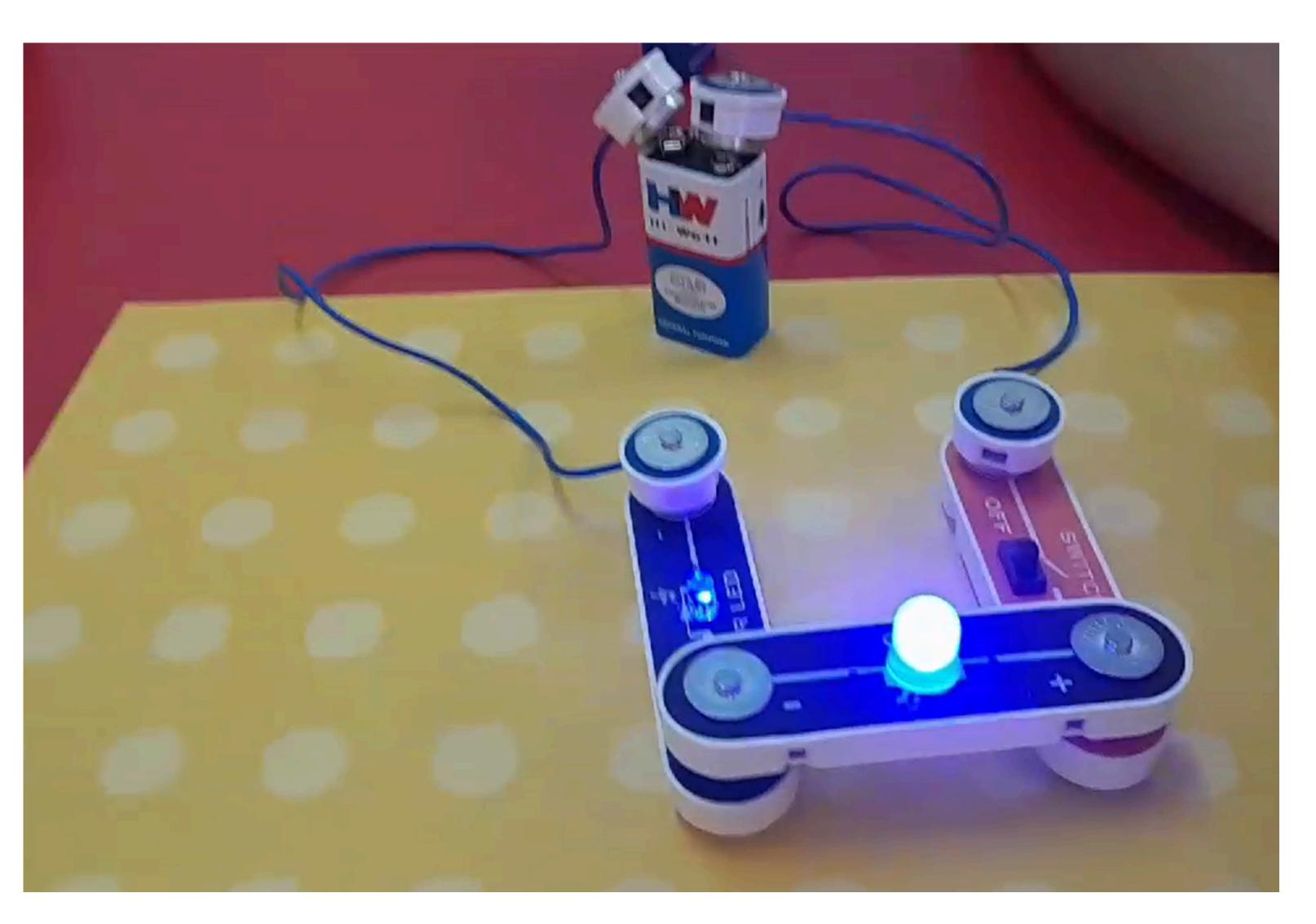
The Smart Electronics Magnetic Block Kit introduces children to the basics of electronics through engaging, hands-on activities.

Smart Block Kit Activities:

Light Up a Bulb: Learn how electricity flows to power a light bulb.

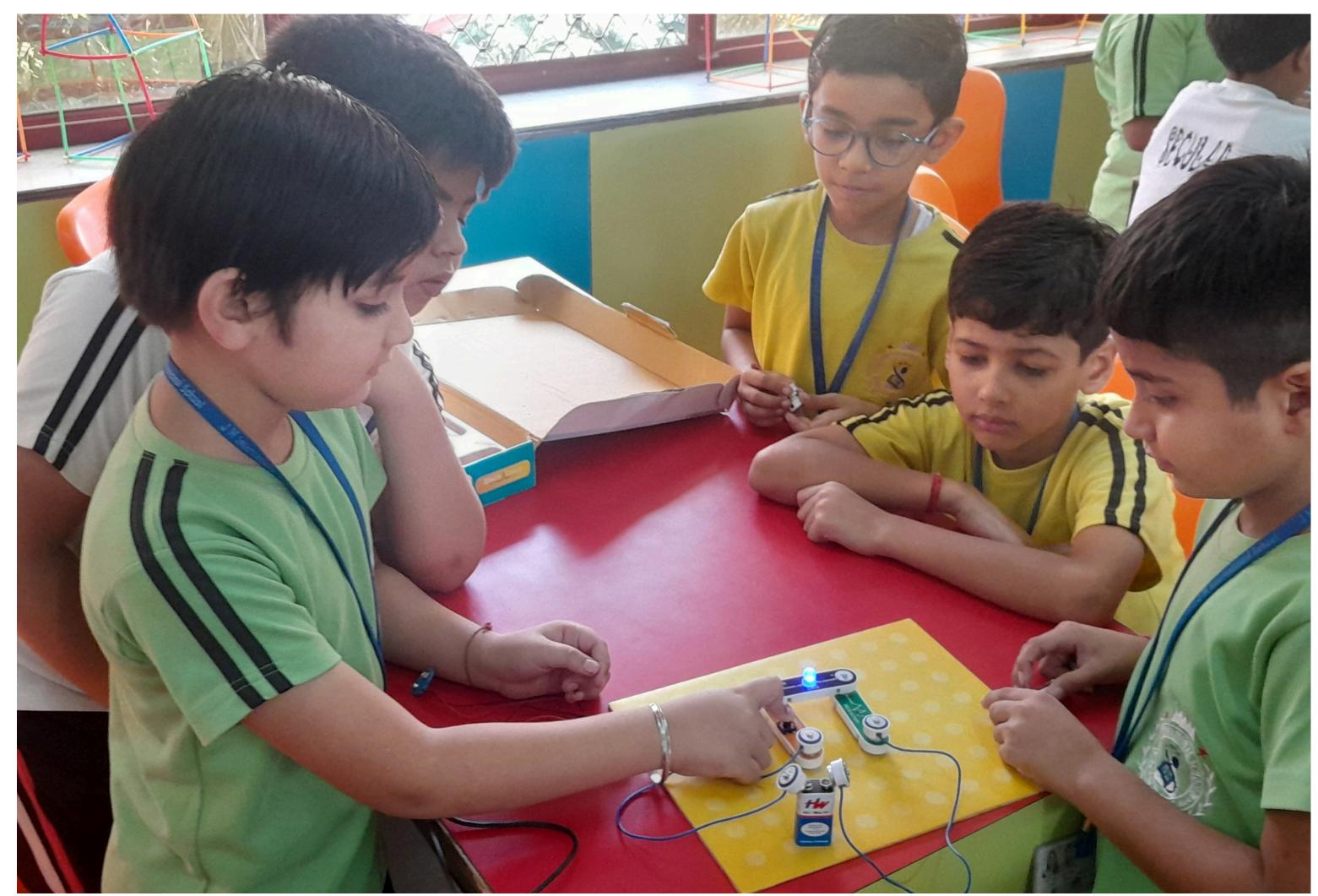
Spin a Motor: Discover how motors convert electrical energy into motion.

Create a Torchlight: Assemble a simple circuit to make a portable light source.











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GLIMPSE OF ACTIVITIES

Grade IV

Engage children in hands-on learning with the Mechanical Robotics Kit and Paper Circuit projects to explore robotics, mechanics, and basic electronics.

Mechanical Robotics Kit Activities:

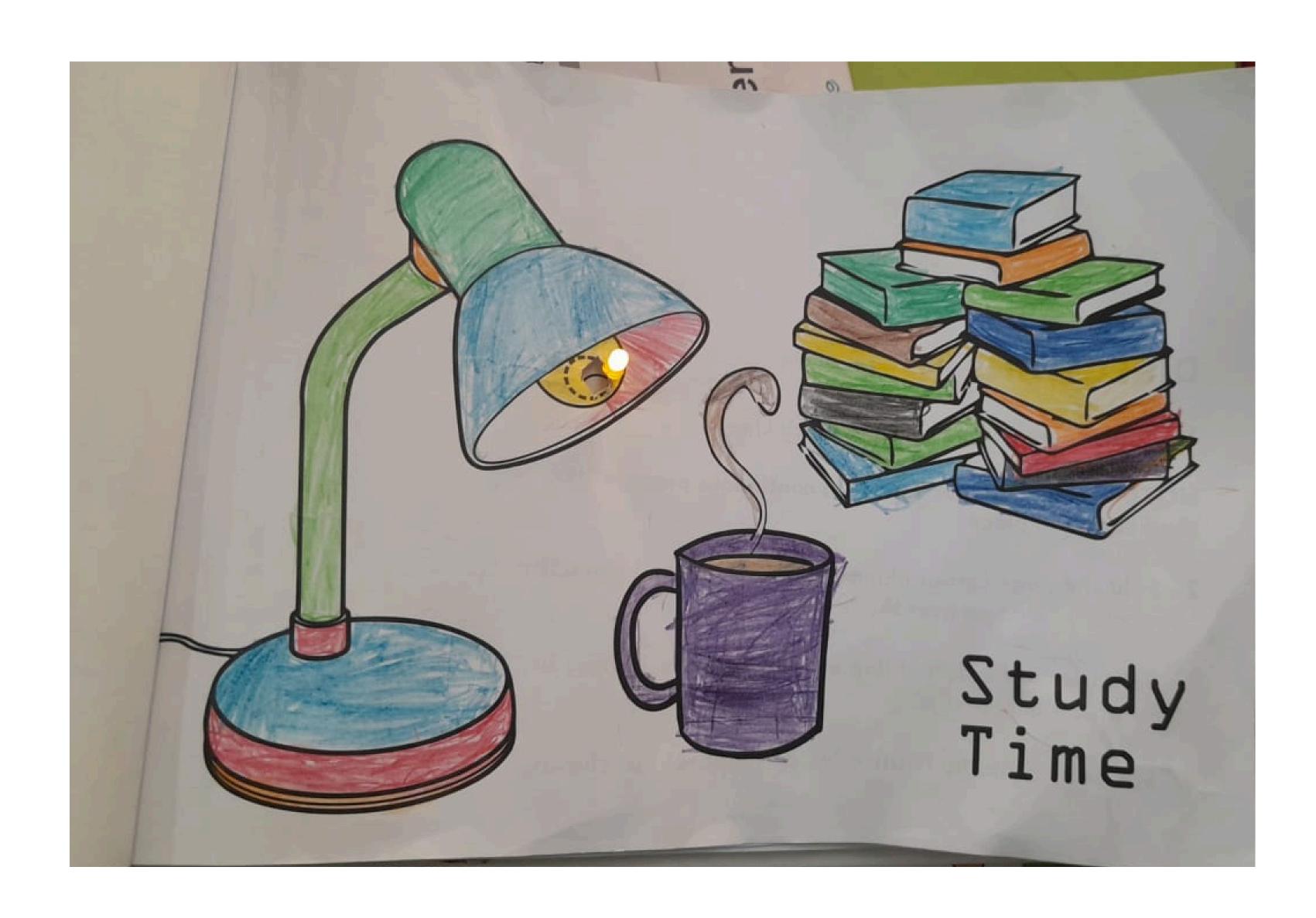
- 1. **Table Fan Bot:** Build a functional table fan to understand simple mechanical systems.
- 2. **Robo Car:** Assemble and control a robotic car to learn about mobility and design.
- 3. **Robo Crane:** Create a robotic crane to explore lifting mechanisms and functionality.

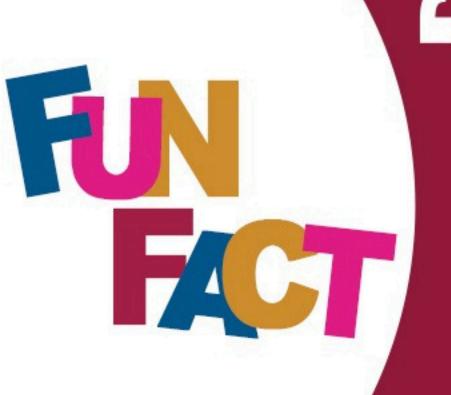
Paper Circuit Activity:

1. Study Time: Design a simple paper circuit to power a light.













GLIMPSE OF ACTIVITIES

Grade V

Engage children in hands-on learning with the Mechanical Robotics Kit and Paper Circuit projects to explore robotics, mechanics, and basic electronics.

Mechanical Robotics Kit Activities:

- 1. **Table Fan Bot:** Build a functional table fan to understand simple mechanical systems.
- 2. **Robo Car:** Assemble and control a robotic car to learn about mobility and design.

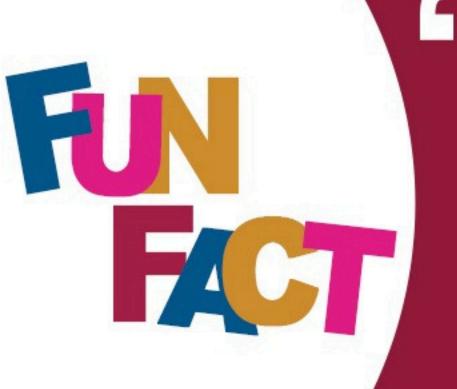
Paper Circuit Activity:

1. **Study Time**: Design a simple paper circuit to power a light, enhancing focus during study sessions while learning basic electronics concepts.













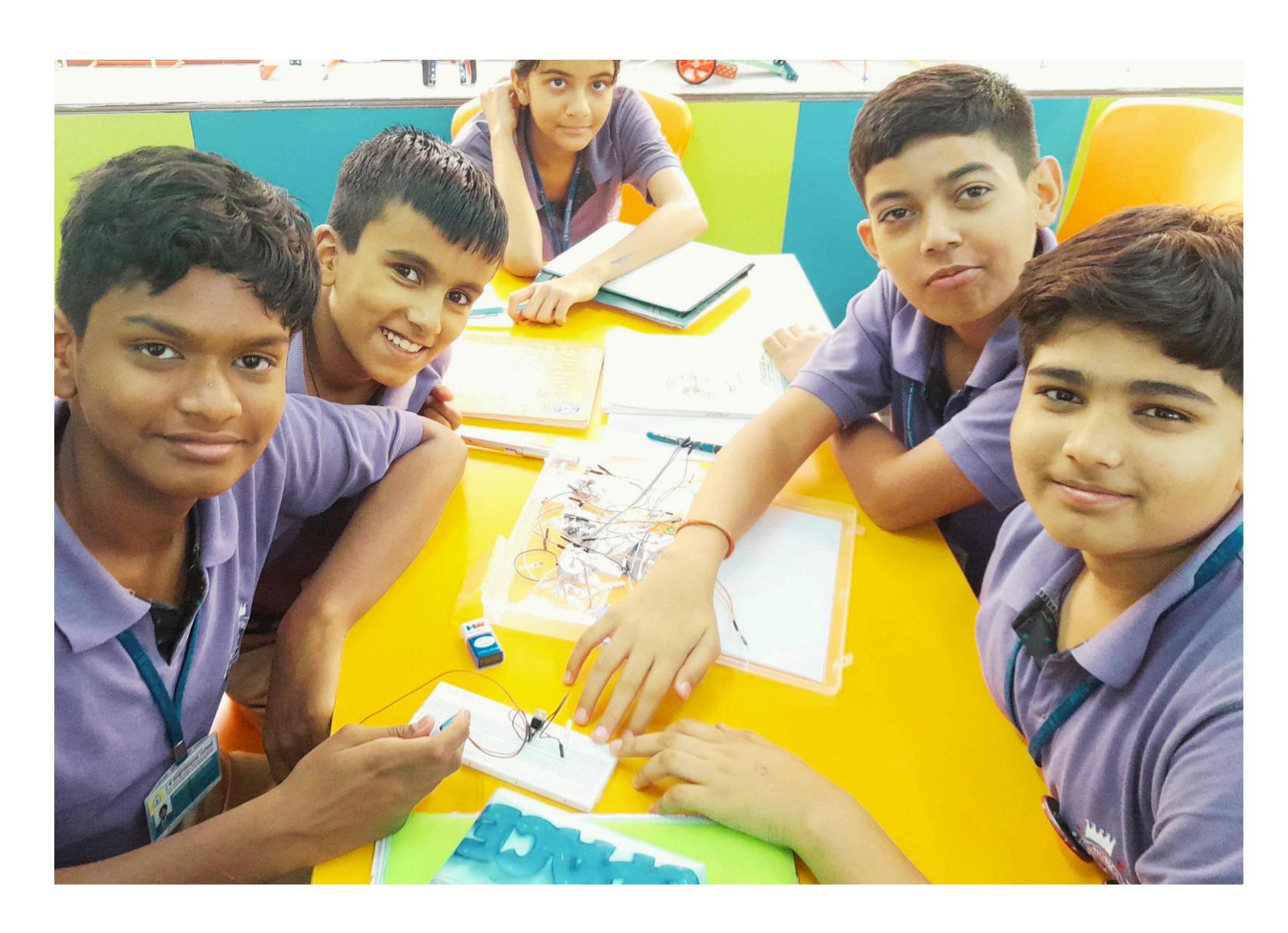
GLIMPSE OF ACTIVITIES

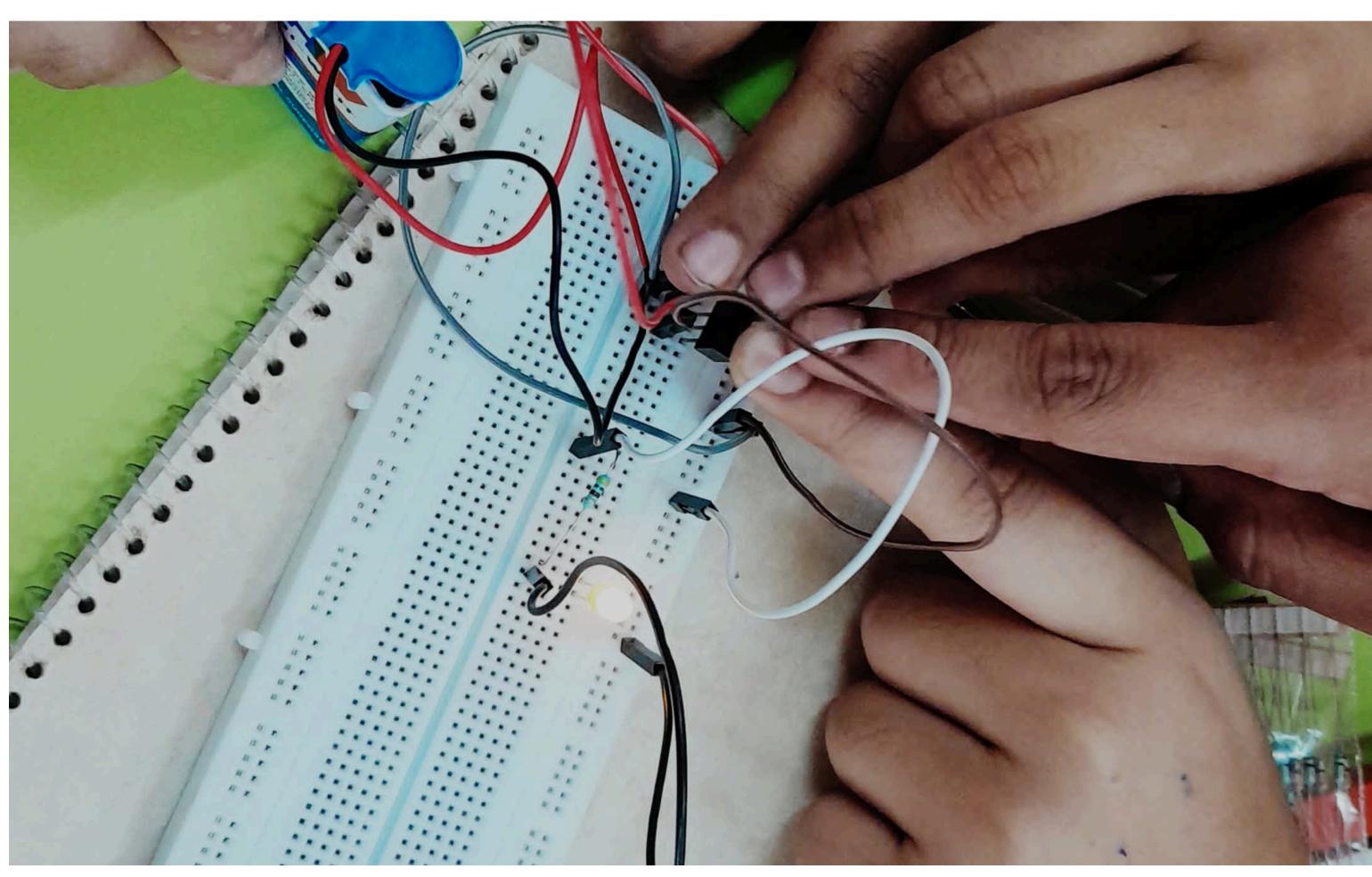
Grade VI

The Electronics Starter Kit helps students explore basic electronics through hands-on activities. It includes components like a breadboard, LEDs, resistors, jumper wires, and a voltage regulator, enabling them to build simple circuits and understand electricity flow.

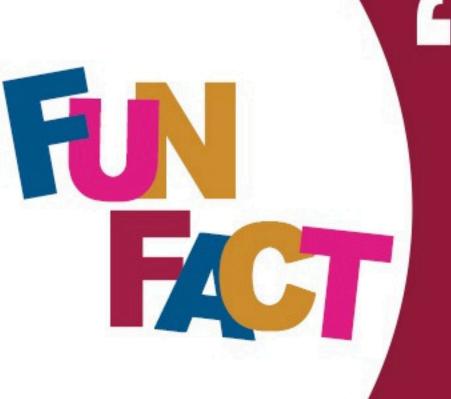


- **LED Glowing:** Students light up an LED to learn about current flow and resistors.
- LED Control Using a Switch:
 Students use a switch to
 control an LED, understanding
 circuit control and
 functionality.













GLIMPSE OF ACTIVITIES

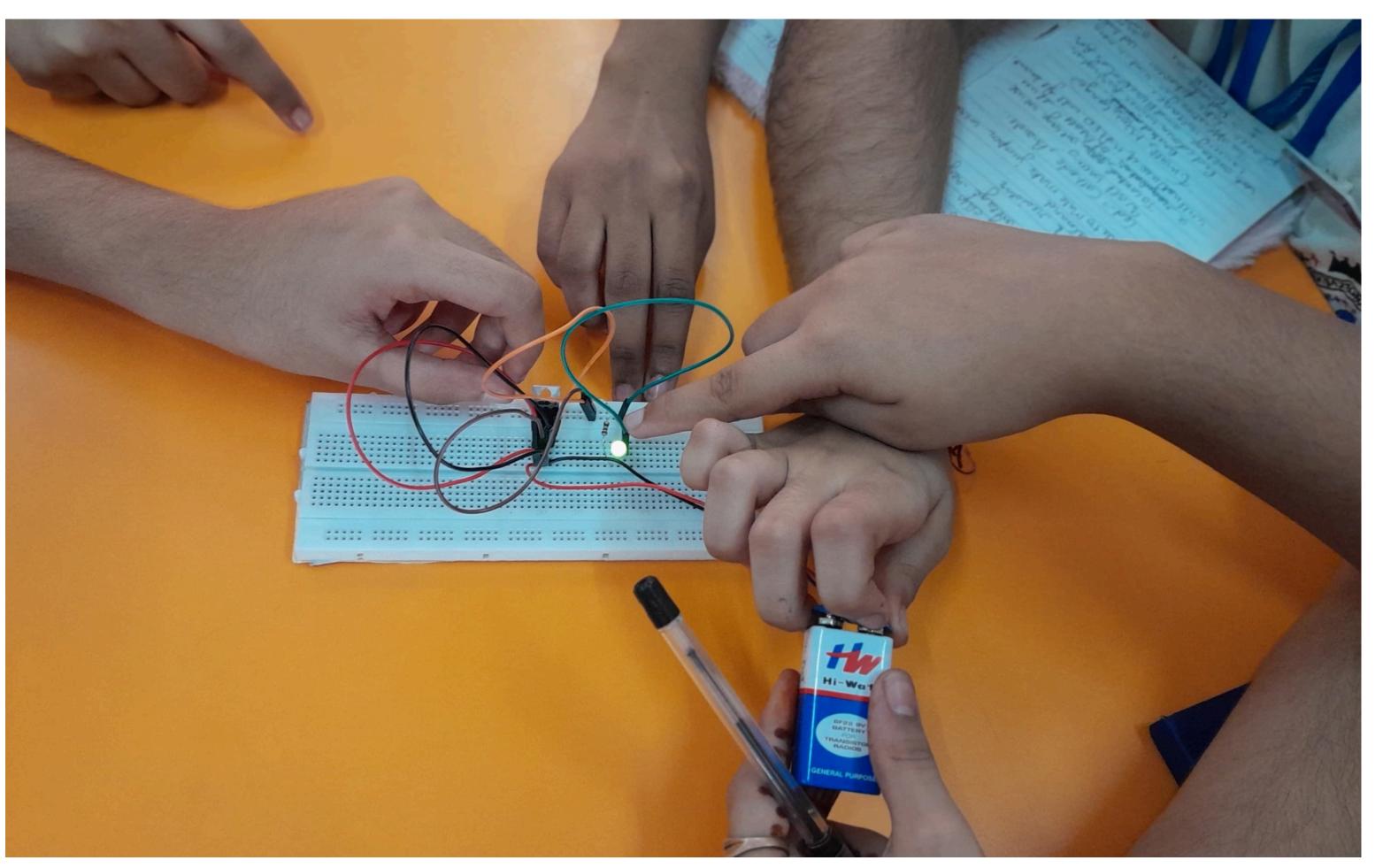
Grade VII

The Electronics Starter Kit helps students explore basic electronics through hands-on activities. It includes components like a breadboard, LEDs, resistors, jumper wires, and a voltage regulator, enabling them to build simple circuits and understand electricity flow.

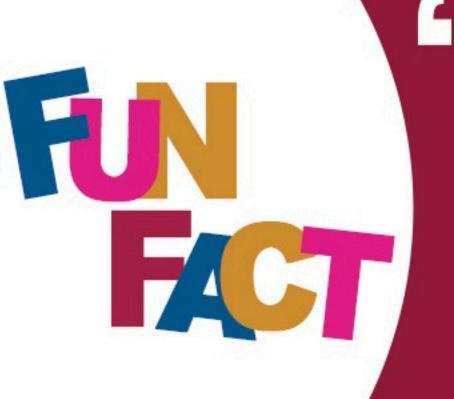
Activities:

- LED Glowing: Students light up an LED to learn about current flow and resistors.
- LED Control Using a Switch: Students use a switch to control an LED, understanding circuit control and functionality.













GLIMPSE OF ACTIVITIES

Grade VIII

The Electronics Starter Kit helps students explore basic electronics through hands-on activities. It includes components like a breadboard, LEDs, resistors, jumper wires, and a voltage regulator, enabling them to build simple circuits and understand electricity flow.



- **LED Glowing:** Students light up an LED to learn about current flow and resistors.
- LED Control Using a Switch:
 Students use a switch to
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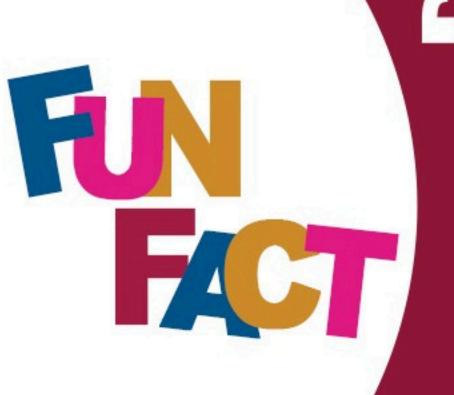
— GLIMPSE OF —— PROJECTS

Project name - Helibot



A **Helibot** is a simple helicopter-inspired robot that combines the principles of robotics and aerodynamics. It typically features lightweight propellers powered by motors to achieve lift and may include a basic control system for movement or stabilization. Helibots are often used in educational projects to teach students about motor control, aerodynamics, and the basics of drone or robotic design.

Impact: A Helibot fosters learning in STEM fields by teaching aerodynamics, electronics, and robotics. It enhances skills like problemsolving, creativity, and critical thinking while introducing students to drone technology. Serving as a foundation for innovation, it inspires advancements in robotics and automation.



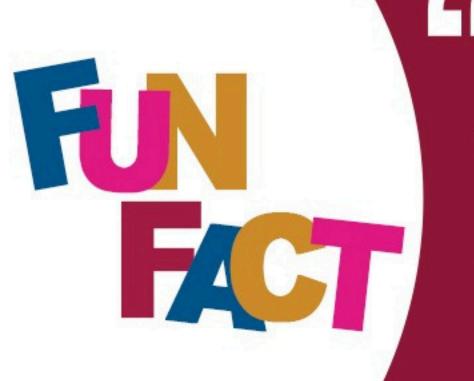
26

Over 1.4 billion workers are in vulnerable employment. SDG 8 focuses on safe and fair working environments.



----ACHIEVEMENTS -----AT A GLANCE

- We have completed 50% of our robotics curriculum, keeping students engaged and excited throughout the process.
- Beyond the curriculum, we've introduced activities that spark curiosity and enhance technical understanding, laying a strong foundation for future careers.
- Our focus is on building a solid base in robotics, with plans to introduce advanced concepts like AI and automation in the coming months.
- Kits like Linker Connectors/Block Kits, Mechatron, Electronics Kits, Tinker Orbit, Paper Circuits, and Smart Circuits kits are boosting students' creativity, focus, and technical skills in electronics and programming.
- These hands-on tools and activities equip students with essential skills, preparing them to become innovators and stay ahead in the world of technology.



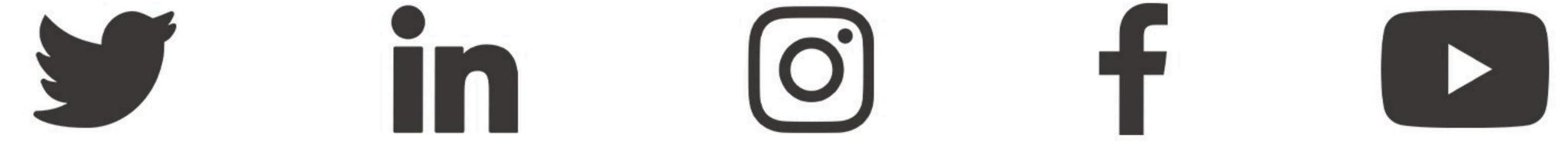
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The goal is to dramatically reduce youth unemployment by providing training and education for future jobs.





THANK YOU







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