

# ATAL TINKERING LAB

Atal Tinkering Lab (ATL) established in the session 2020-21 in the vidyalaya is a flagship program of NITI aayog/ Govt.of India.

Under this program, students are being engaged in a wide range of activities aimed at fostering innovation and practical learning.

## **Some of the activities include:**

1. Robotics: Designing, building, and programming robots to perform specific tasks.
2. 3D Printing: Creating three-dimensional objects using additive manufacturing technology.
3. Electronics: Learning about circuits, sensors, microcontrollers, and other electronic components.
4. Coding: Developing coding skills through programming languages like Python, Scratch, and Arduino.
5. Internet of Things (IoT): Exploring the connection of devices to the internet to collect and exchange data.
6. Rapid Prototyping: Creating quick prototypes of ideas using various materials and tools.
7. Design Thinking: Applying a human-centered approach to problem-solving and innovation.
8. STEM Projects: Engaging in science, technology, engineering, and mathematics projects that encourage hands-on learning and experimentation.

These activities provide students with opportunities to explore their interests, develop critical thinking skills, and prepare for future careers in STEM fields.

\* Expert seminars are conducted - 11 days ADVANCED TRAINING SESSION was conducted in the month of Feb-March 24 by a trainer Er. Rahul from TECHKNOWSKOLA pvt.ltd.

## Benefits For students:

1. Hands-on Learning: ATLs provide students with practical, hands-on experience in STEM subjects, fostering a deeper understanding of concepts.
2. Creativity and Innovation: Students are encouraged to explore their creativity and innovative thinking through various activities like robotics, coding, and 3D printing.
3. Problem-solving Skills: Engaging in projects and challenges within ATLs helps students develop critical thinking and problem-solving abilities.
4. Entrepreneurial Mindset: ATLs promote an entrepreneurial mindset by encouraging students to identify problems and develop solutions using technology and innovation.
5. Collaboration and Communication: Students collaborate with peers, teachers, and mentors, enhancing their teamwork and communication skills.
6. Career Readiness: By gaining exposure to emerging technologies and practical skills.

## PHOTO GALLERY/ ATL LAB























