curiosity gym
Imagine your question

Setup a Tinkering Lab -a STEAMing Innovation Hub™

SCIENCE TECHNOLOGY ENGINEERING ART MATHEMATICS

Gamify Learning

Students Build a Basket Ball Launcher

Learning:

- Design
- Basic Scientific Principles
- Teamwork
- Analytical

Students Work with Gears

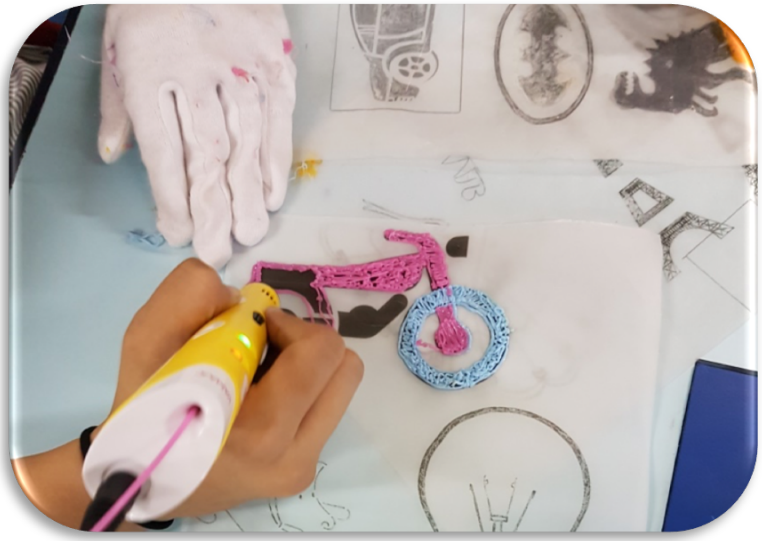
Learning:

- Design
- Direction & Rotation
- Motor Skills
- Problem Solving

Encourage Creativity

3D Doodling

Students explore their creativity



Learning:

- Design
- Art
- FUN

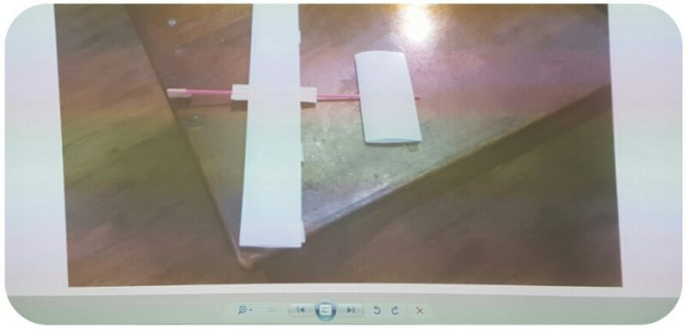
Building a Laser Maze

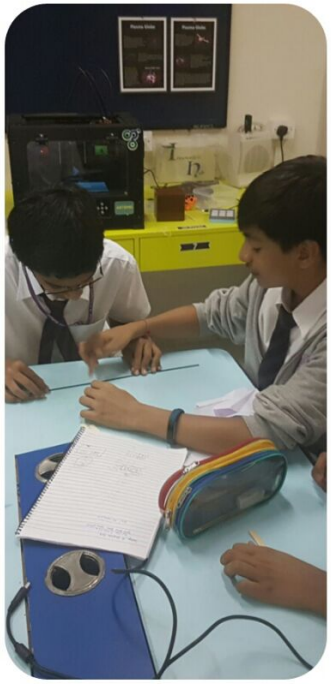
Students build a Laser Maze

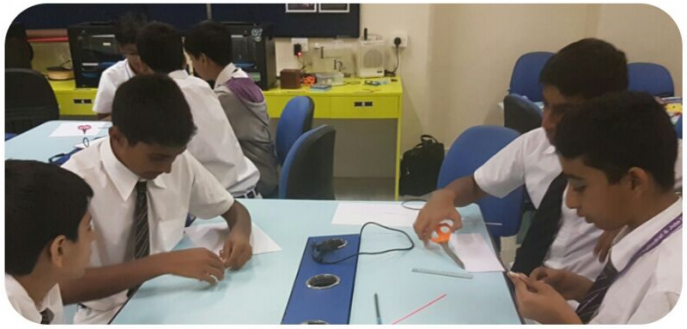
Learning:

- Arduino
- Properties of Light
- Working of Lasers
- Fine motor skills

Learn about Dynamics of Flight

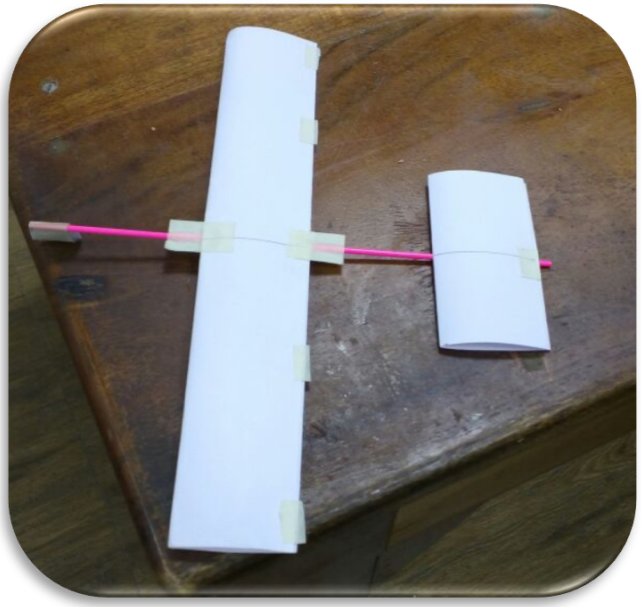




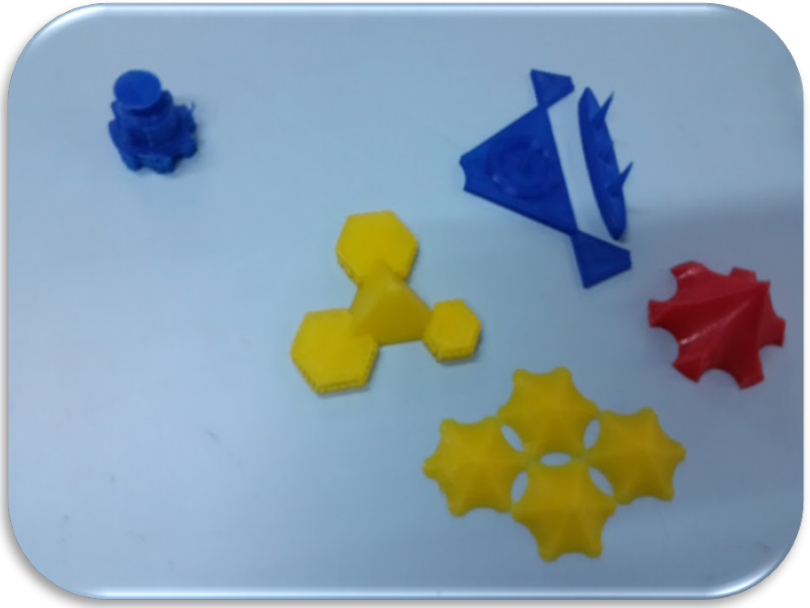


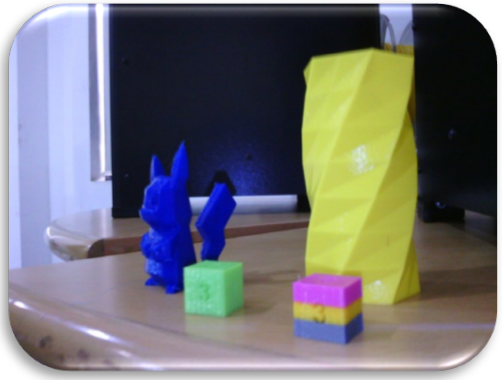
Learning:

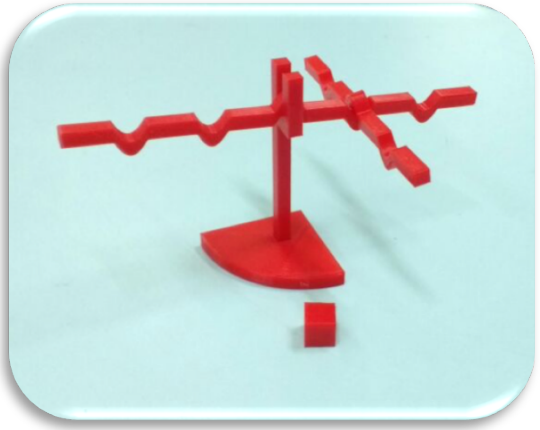
- Flight Dynamics;
- Centre of Gravity;
- Fine Motor Skills



Designing & 3D-Printing

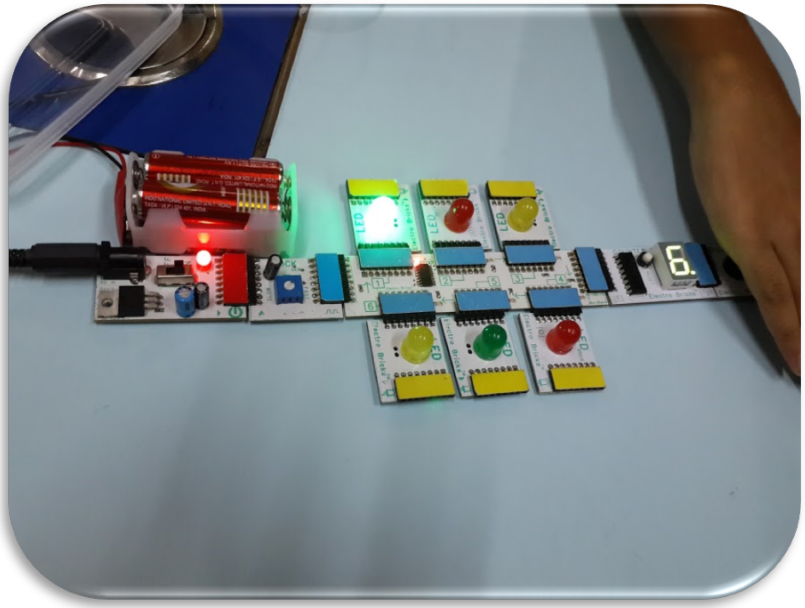


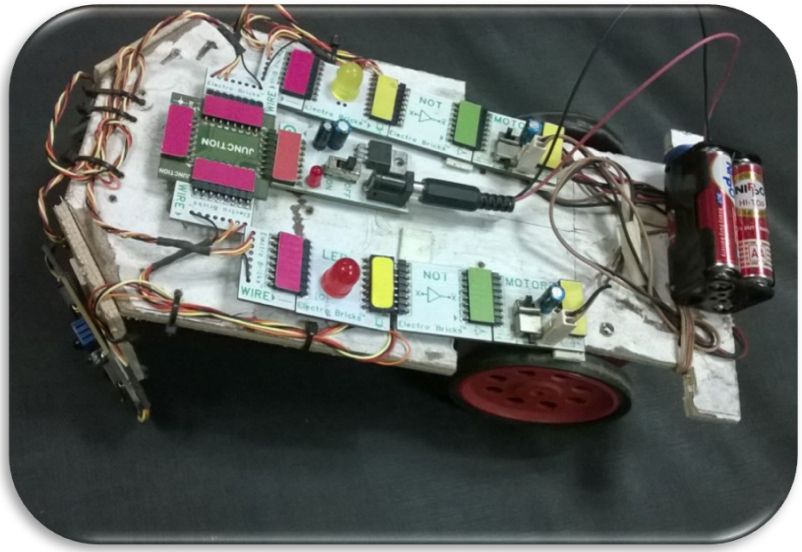




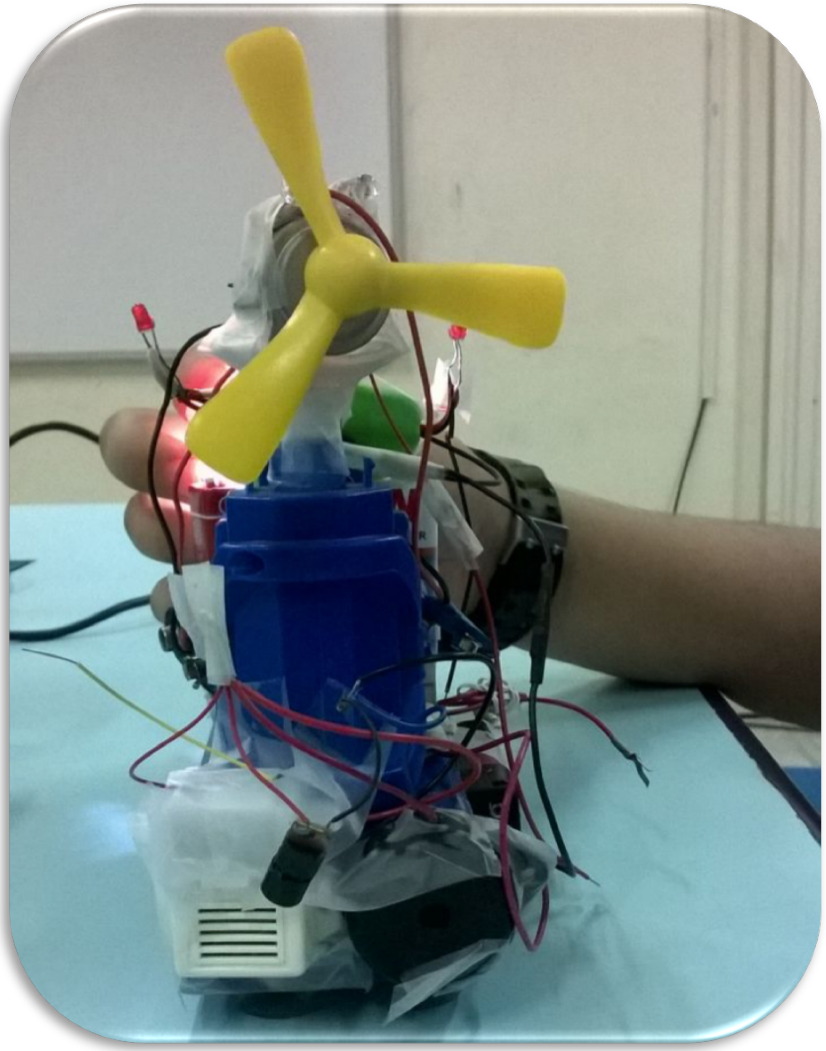
3D Printed designs by students

Basic Electronics

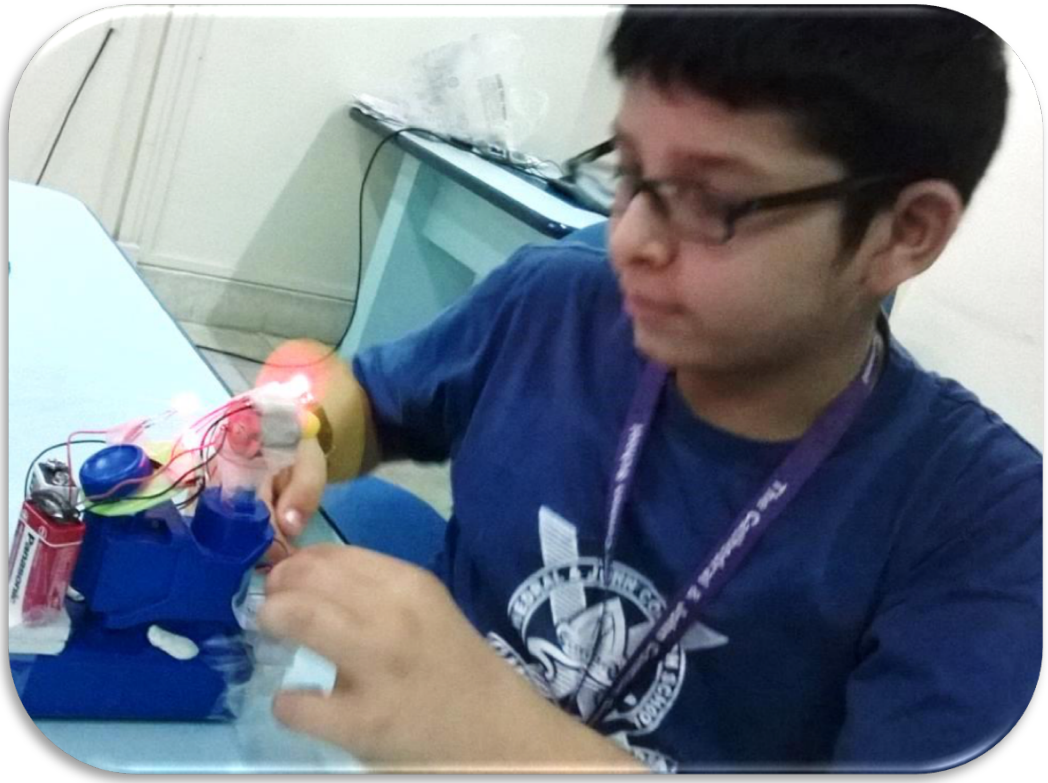




Independent innovativeness



Contraption visualized and Created by a Std 6 student on his own



Get hands on with the Internet of Things (IoT)

Learning:

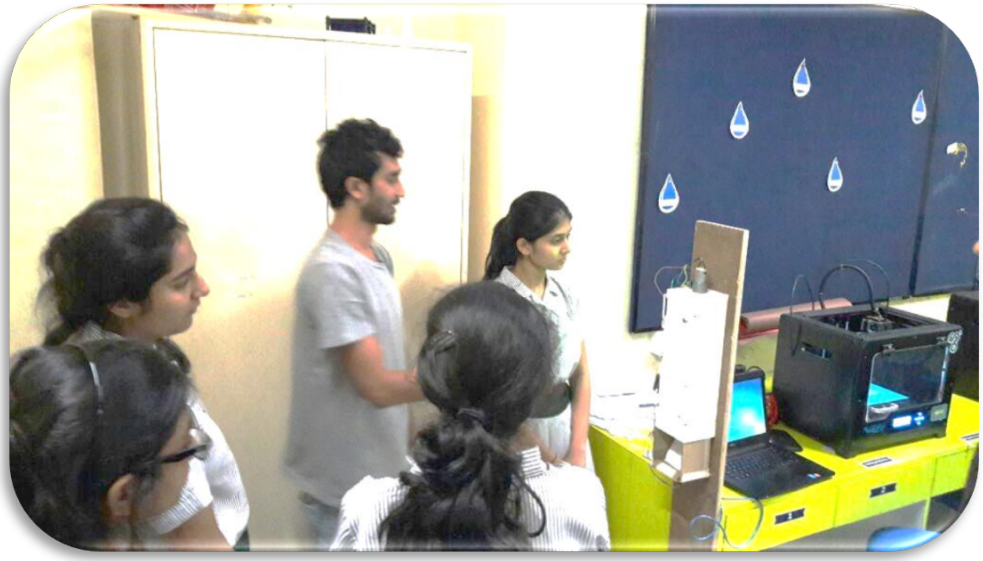
- Arduino
- Coding
- Programming
- Game Design

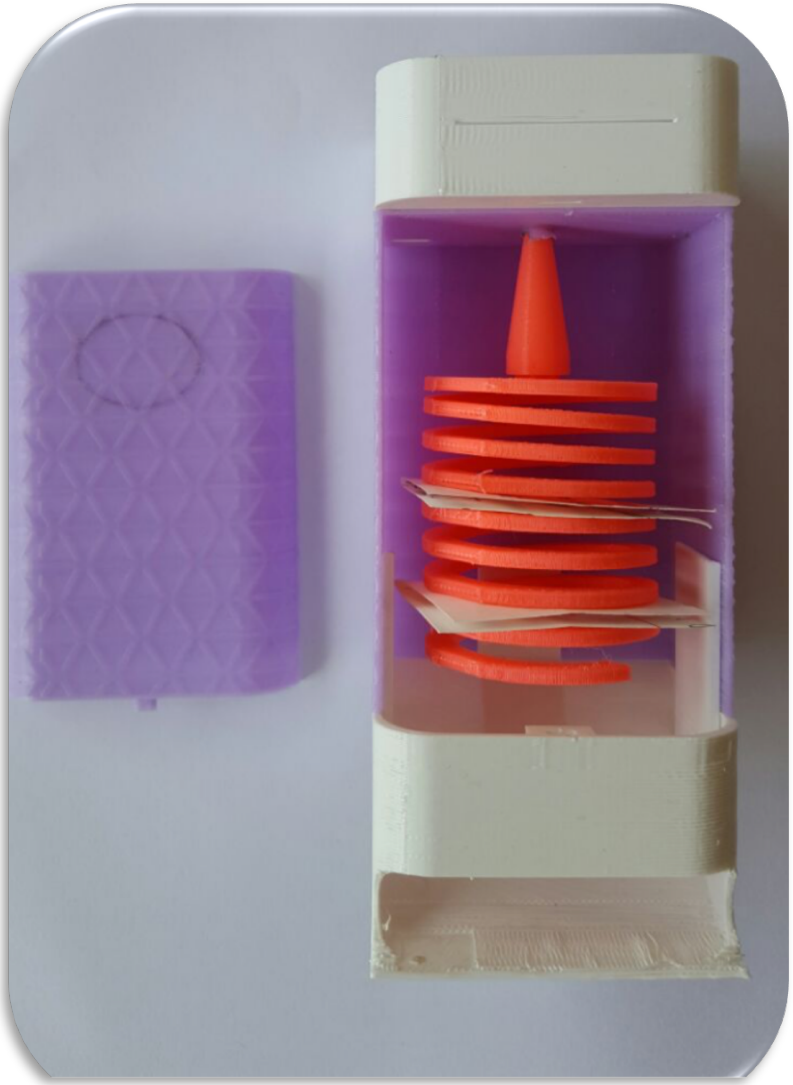
Arduino Programmed gadgets created

Learning:

- Arduino
- Programming
- Logic Flow
- 3D Printing
- Game Design

Design Thinking and Prototyping



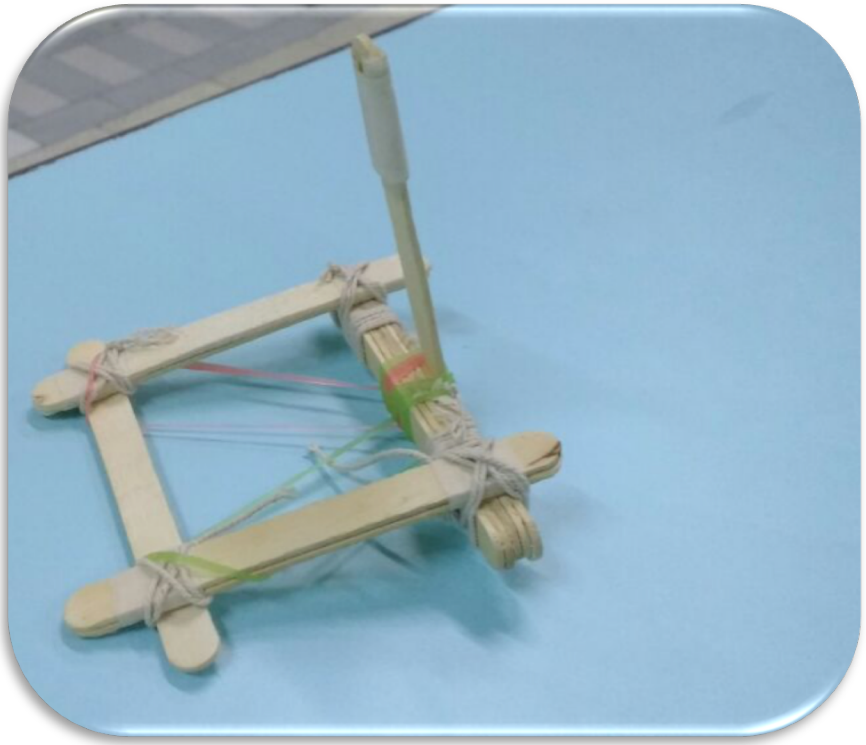


A Sanitary Napkin Dispenser – designed by Students of Std 11

Learning:

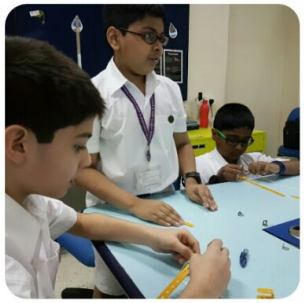
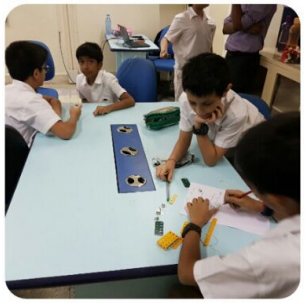
- Design
- Innovation
- Critical Thinking
- Social Entrepreneurship

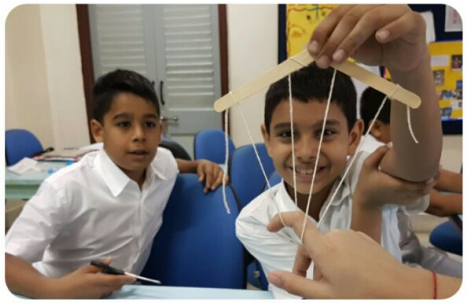
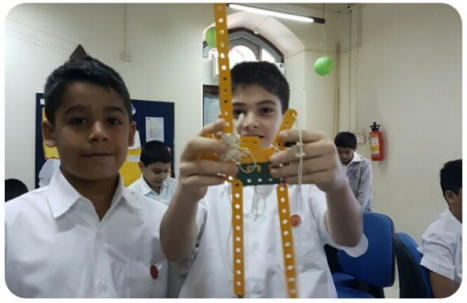
Build A Catapult



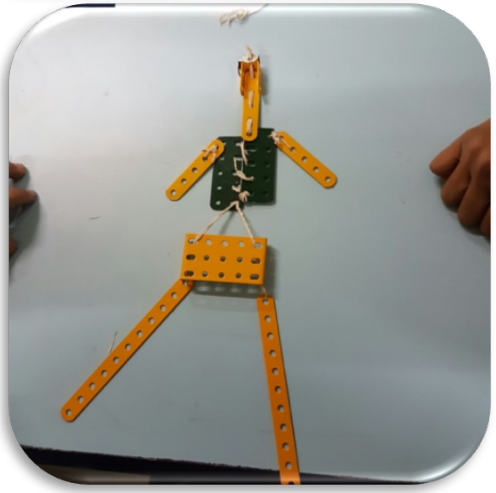
Learning:

- Building a structure
- Mechanical Stability
- Many Physics concepts


Structure Cloning

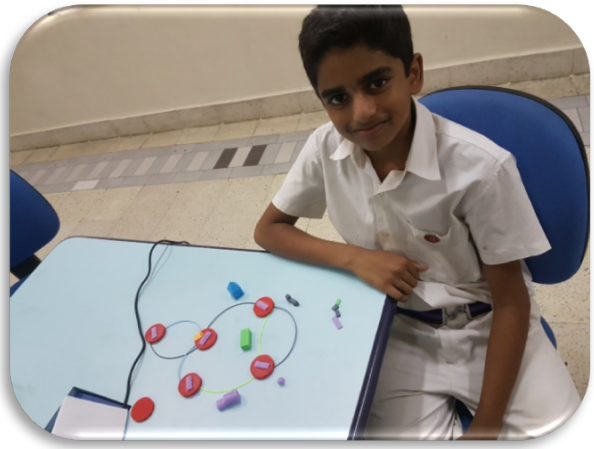



Learning:

- Fine Motor Skills
- Imagination

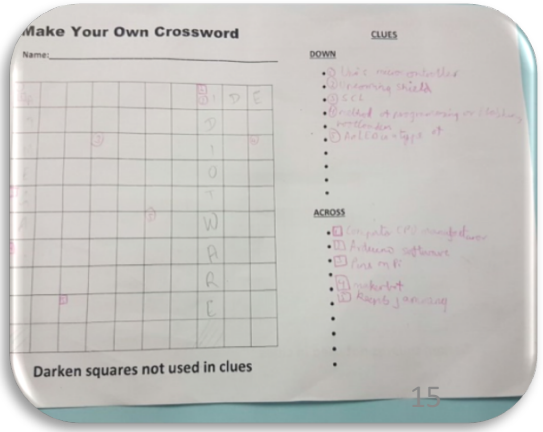
Critical Thinking

Students learn Logic & Critical Thinking with the Travelling Salesman Game

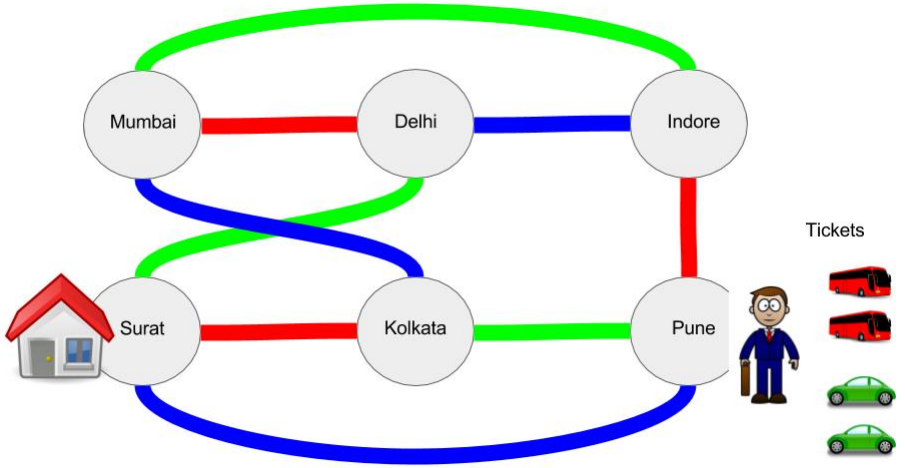


Students make a Crossword

Learning: Critical & Lateral Thinking

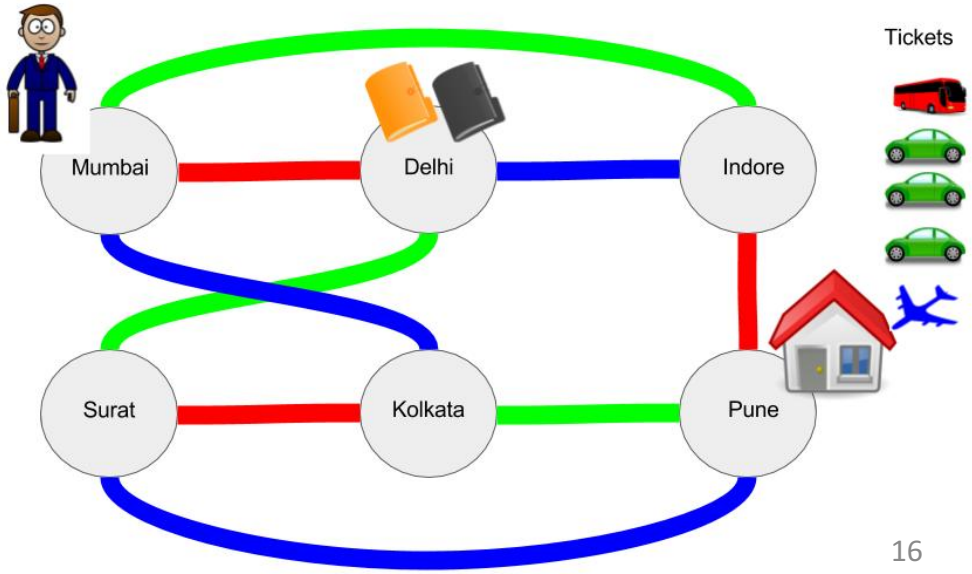


Travelling Salesman Challenges



Find the optimal route

Find ways to improve game



Contests


DEADLINE:
August 19th, 2016
THINK YOU HAVE A GREAT IDEA FOR A GAME
GAME DESIGN
GATHER YOUR TROOPS, MAKE YOUR GAME AND WIN
Who can Participate :
Contest open to all students from Std. 5 to Std. 8
RULES
• Can make any Game
• Game should not be Biased
• Strategy for winning and Rules to be provided
• Appropriate mix of Strategy & Luck
• Game should complete in finite time.
Team Size
2 to 4 Students
Prizes Include :
• 2 Dedicated Doodler for each winning team at Lunch time for a month
• 2 Phone Stand/Phone Case
• 16 hour print (4 x 4 hours)
• 1 CG Arduino Sheild


Crossword Contest
Themes
• Books and/or Movies
• Sports
• Inventions and Discoveries
• General Knowledge
• Brands
Deadline: 11th Nov
Scoring Priority
• Least Black Squares
• Longest Words Used
• Scrabble points Apply
RULES
• All words need to have clues.
• No words should go backwards, upwards or diagonally
• Each word should be differentiated by a darkened square
• Should have atleast 10 words
• The crossword should not span outside the 10 X 10 grid
• Atleast 1 letter in each row and column
• No hanging words
• No abbreviations

Proud of their Creations

Board Games with Strategy, Rules

ONE : A Strategy Board Game designed by students of Std 5

Learnings Applied:

- 3D Printing
- Design
- Logic

CATCH A MURDERER : A Board Game designed by students of Std 6

Learnings Applied:

- 3D Printing Design
- Research of historical monuments to 3D print
- Cryptography for Clues

Word Games, Arcade games

PICTIONARY WITH A DICTIONARY :
A Word-Card Game designed by students of Std 7

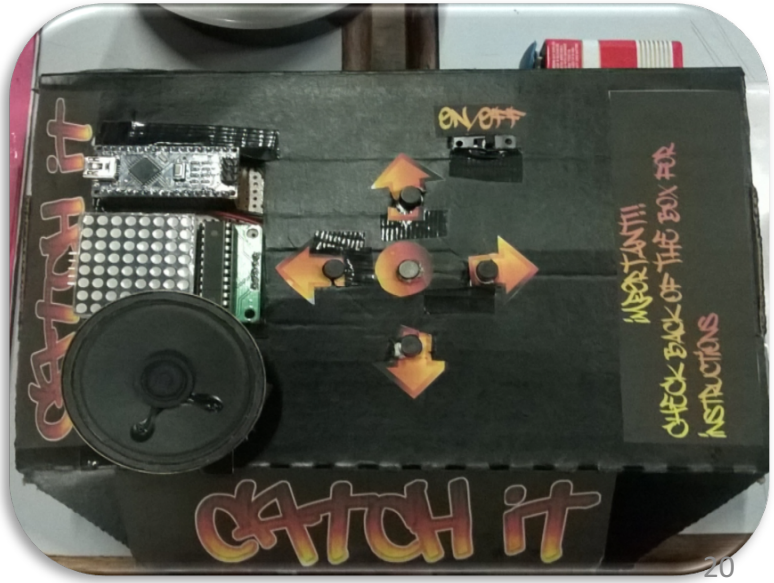
Learnings Applied:

- Design
- Logic

CATCH IT : A Game created using Arduino by a student of Std 8

Learnings Applied:

- Arduino
- Design
- Logic



Scratch Games,
An enhanced version of Life like Chess

THE WAR: A strategy-cum-card-cum-board game designed by students of Std 7

Learnings Applied:

- 3D Printing
- Design
- Logic
- Luck and Chance added

REALM RUSH : A Scratch-based computer game designed by students of Std 6

Learnings Applied:

- Scratch

3D printed mazes, Card games

COLOR PUZZLE: A game developed using Arduino by students of Std 7

Learnings Applied:

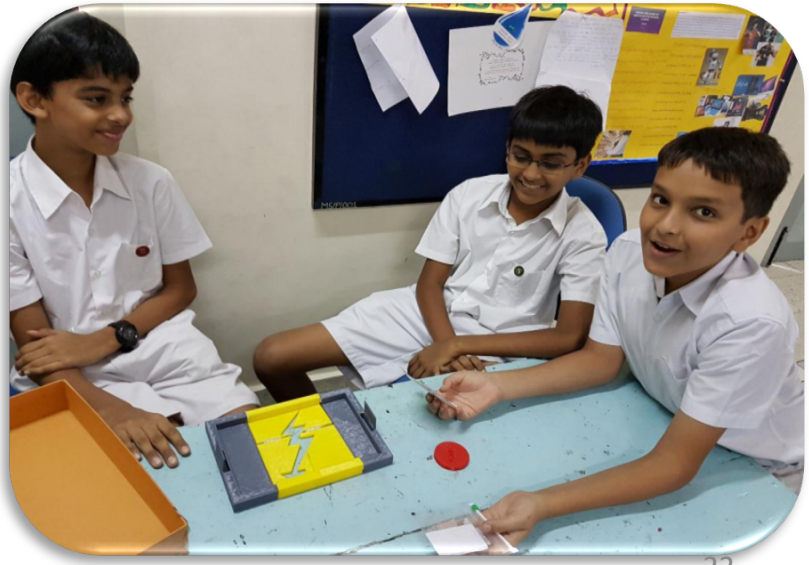
- 3D Printing
- Strategy
- Design
- Logic
- Arduino

VERSUS FLARROW:

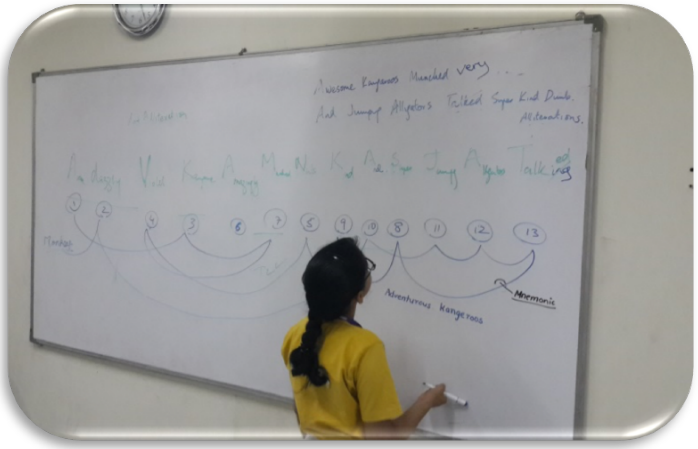
A trading card game designed by Std. 6 students

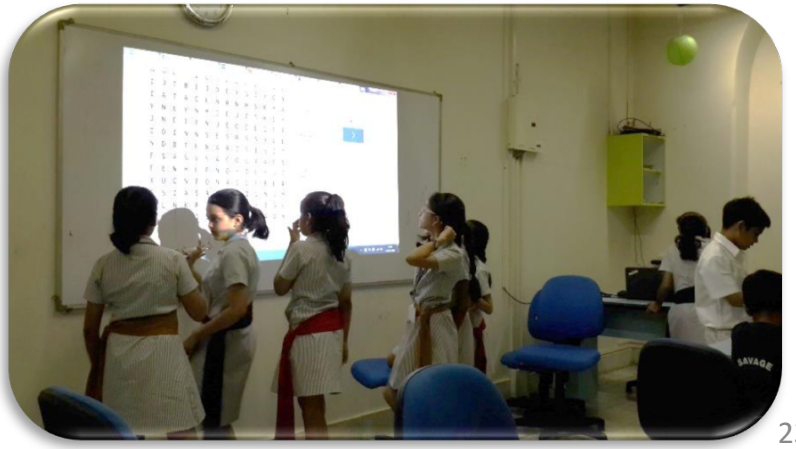
Learnings Applied:

- 3D Printing
- Strategy
- Design
- Logic



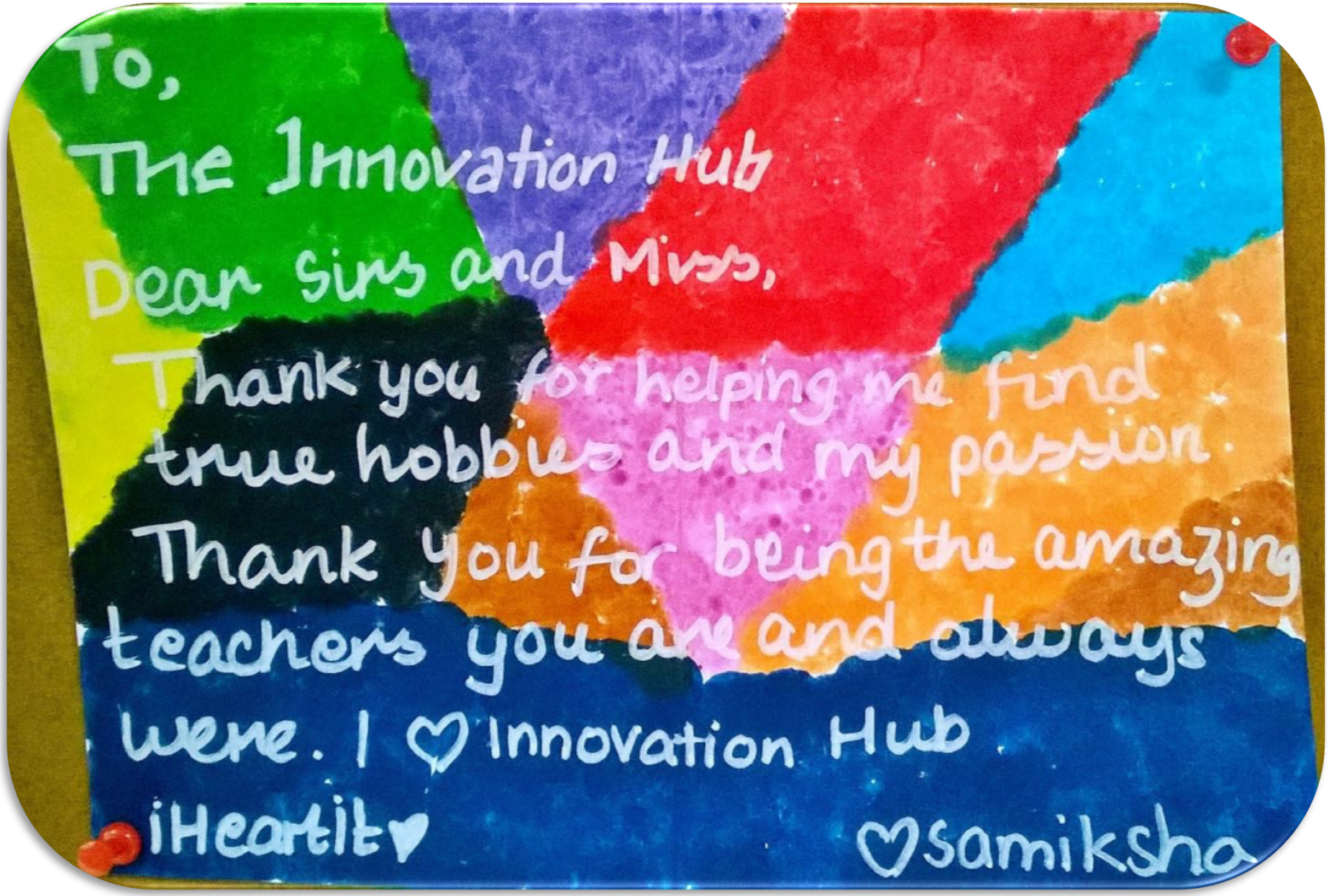
Lunch Hour at the Innovation Hub





REFERENCES

- Mrs. Meera Isaacs, Principal, Cathedral School
- Mrs. Dhamyanti Bhattacharya, Headmistress, Cathedral Middle School
- Mrs. Sejal Mody, CAS IB Co-ordinator, Cathedral Senior School
- Dr. Ranjan Banerjee, Dean, SPJIMR
- Dr. Suranjan Das, Senior Faculty, SPJIMR
- Dr. Shahaf Gal, Education Advisor, Israel Education Ministry


To,
The Innovation Hub
Dear Sirs and Mvss,
Thank you for helping me find
true hobbies and my passion.
Thank You for being the amazing
teachers you are and always
were. I ♡ Innovation Hub
iHeartit♥
♡samiksha