MakersBox September

Let's look at everything students made in the Maker Space in September

Grade 1, Walking Pianos & Playing Drums with Bananas!

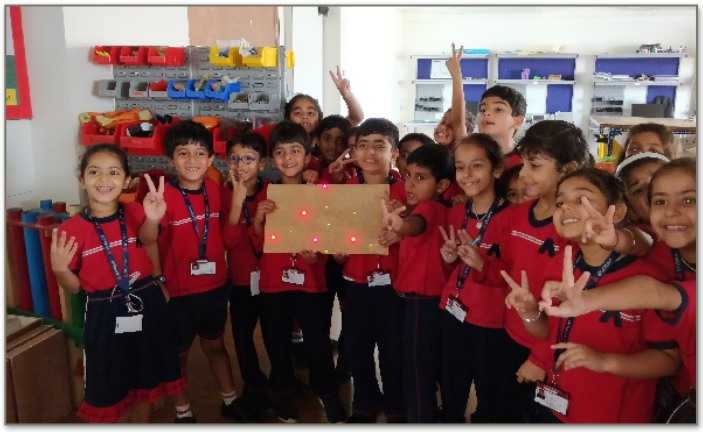
Conductors & Insulators, Science

This time around, students deepened their knowledge about materials and their properties and found out- some materials conduct electricity and some don't. What did they use this knowledge for? To build two musical instrument that works on the same principle!

Grade 2 & 3, Mapping the World

Oceans & Continents, Landforms, Humanities

While Grade.2 students etched a world map using a Laser Etcher and put a spin on the map filling exercise by wiring it up with different coloured LED's to represent Oceans and Continents, Grade.3 worked with Paper Mâché to represent the landforms of India.



Grade 4, Designing in 3D

Planes and Coordinates, Mathematics

How do shapes behave in a 2D plane and how does it differ in 3D? Students learnt this by digitally designing objects on a 3D Design Software.. They also explored resin- a material found naturally and also produced synthetically and are now working to build artefacts with the same.

Grade 5, Gluey Sticky Slime

State of Matter, Science

Grade.5 students explored matter and how some materials change theirs shape when force is applied and regain it back to understand reversible changes in State of Matter by making their own slime!

Grade 6, Bicycle Mayhem

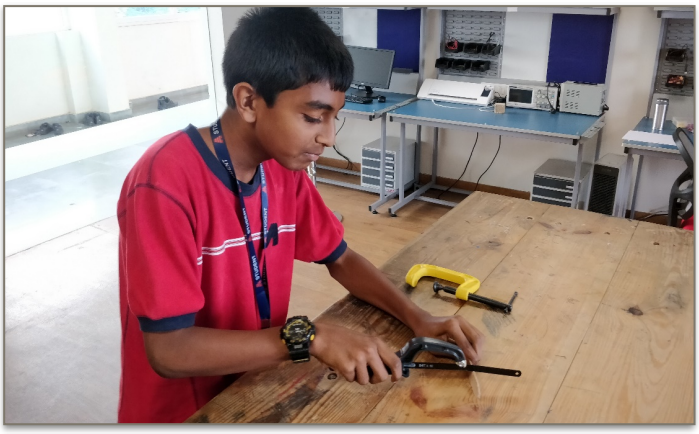
Force & Motion, Science

What better way to learn something by taking it apart? Grade.6 students took apart a bicycle to learn about gear mechanism, balance, structural design, and motion. Next Challenge? To put it back together.

Grade.7 & Grade.8, Lava Lamps & Alternative Sources of Energy

Liquids, Electricity, Science

While Grade. 7 is working on a Lava Lamp to understand how two immiscible liquids react when a third element is added, Grade.8 is working to generate electricity through alternative sources of energy. They also brainstormed and made sketches for exoskeletons for Paralympians.



Enrichment Program

As a part of their Enrichment Activity inside the Maker Space, students are currently working on technologies like 3D Designing, Internet of Things and a device that plays an audio file when a button is pressed on it.

World Studies, Jainism

For the month of September, as a a part of their World Studies Curriculum, students learnt about the faith of Jainism.

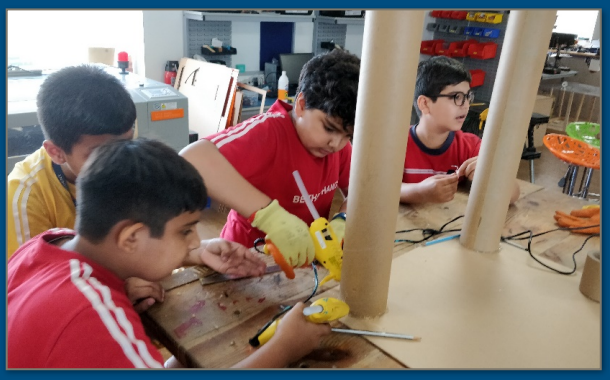
Junior grades learnt about Architecture in the context of Jainism and explored questions such as- What makes Jain temples cooler than other temples? What are other unique features of Jain Architecture? They also made a model of Jain Temple based on same principle.

Senior Grade worked on designing a game around Jainism with an option to make a digital or a physical game.

Primary Grade: Model of a Jain Temple

Step.1: Ideation & Design

Students were introduced to the word Architecture and what it means in the context of Jainism. After discussing essential features of the Jain architecture such as light and ventilation and number of pillars, students brainstormed their own models of Jain Temples.



Step.2: Build

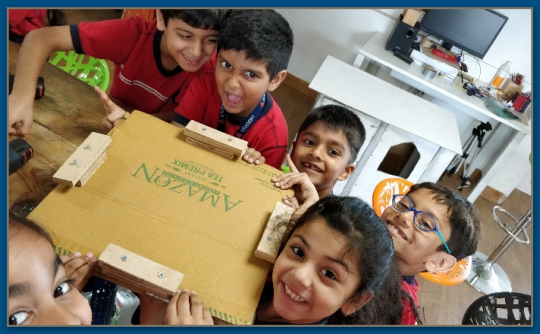
With the design ready, students began building their models. Students used tools ranging from woodworking tools to scissors and hot glue and worked with cardboard to built their temple.

Step.3: Aesthetics

Why are Jain Temples white? What role does the colour white play in keeping the temples cool? And how does it affect how temples look? After spending some time thinking on these questions, students started working on the aesthetics of their models.

Step.4: Final Project

Putting the pillars together, painting it white and building the boundary walls, the temple was finally ready. All hard work paid off and students concluded their projects by filling in their reflection forms.



Secondary Grade: Design Thinking & Gamification

Step.1: Ideation

What is gamification? How does the process of Design Thinking look in action? Why is it important for every design project to be user-centric? How would it look like in this project? Students thought over these questions and drafted a blueprint fro a game that will teach other students about the faith of Jainism.

Step.2: Designing the Game

Students were given two options: to build a physical game- a board game, a card game or any other that they could think of or a digital game. After designing the game and testing, students worked on how the game look.

Step.3: Final Project

Students completed their project by presenting their games to their peers and filling in their reflection forms.