

MakersBox August

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

Grade 1, Play Doh Artefacts

Material Study, Science

Grade 1 students explored Play Doh as a material and understood the effects of external stimulus such as pressure and heat on different materials.



Grade 2, Conductors and Insulators

Electricity and Current, Science

Students experimented with different materials and found out that some of them conduct electricity and some of them don't. Next step, building an Interactive Musical Instrument using the same principle.



Grade 3 & 4, Volcanoes and Stamps

Humanities

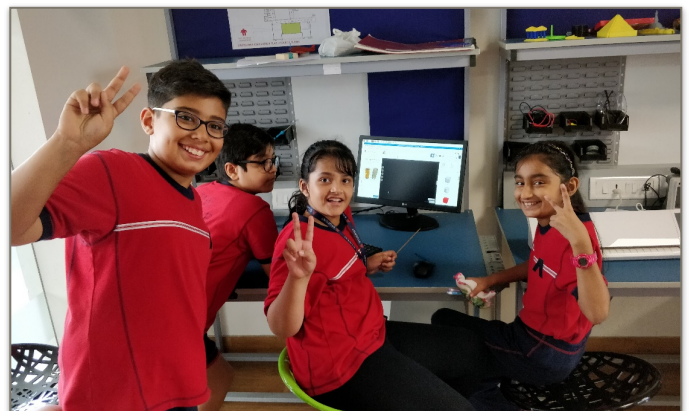
Grade 3 is currently working on making their own Volcanoes connecting back to different landforms they have been studying in Humanities and Grade 4 made their own Stamps using Styrofoam, a new material, and fabrication tools such as a Laser Etcher to depict the symbols of the Qin Dynasty.



Grade 5, Maps & Monuments

Delhi Sultanate, Humanities

Grade 5 students laser etched the map of Old Delhi and 3D-Printed the Monuments, visualising the bygone era. Students also got introduced to 3D Designing and worked with TinkerCad to replicate the design of old monuments.



Grade 6, Marble Run with Magnets

Gravity, Force, Friction, Science

Grade 6 continued working on their Marble Run Challenge answering questions such as what is the effect of the magnet on the Metal Ball? How will they increase or decrease the speed of the ball? What is the effect of the angle of the slope on the ball?



Grade 7, Ultrasonic Robot

Sound, Science

After working with an Ultrasonic Sensors, students applied their understanding to build an obstacle avoiding robot learning multiple skills from circuitry to programming.



World Studies, Islam

Both Primary & Secondary Grade worked on creating a Solar Tracking Device to understand the relevance of the position of the Sun in the Faith of Islam. Whereas Primary Grade worked on a traditional Sun Dial, the Secondary Grade worked on a Digital Solar Tracker. Here is a look at how these projects worked out inside the Maker Space:

Primary Grade: Sun Dial

Step.1: Ideation & Design

Students put their heads together and came up with a Design for the Sun Dial using the oldest material available to man, Wood.



Step.2: Building the Sun Dial

Students cut, chiseled and sanded wood to form the base of their Sun Dial.

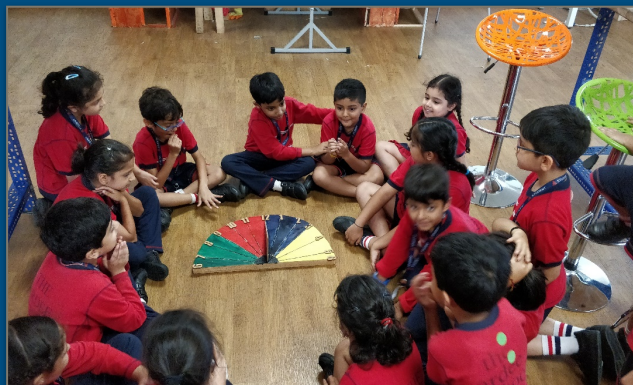
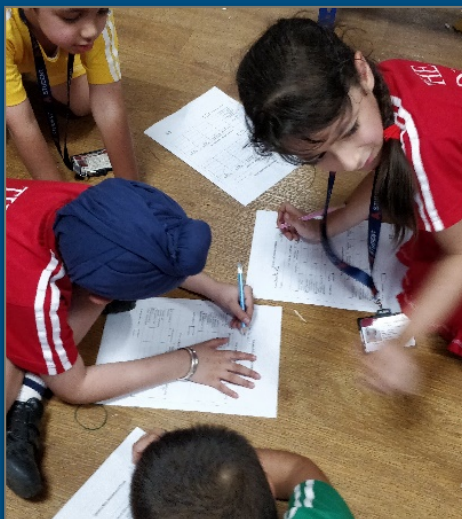
Step.3: Aesthetics

Once the Sun Dial was ready, students chose to paint it in multiple colours and divided and marked the dial to denote time.



Step.4: Final Project

Finally, students put everything together and gave the final touches to their Grand Sun Dial and also filled up their self-reflection forms.



Secondary Grade: Solar Tracking Device

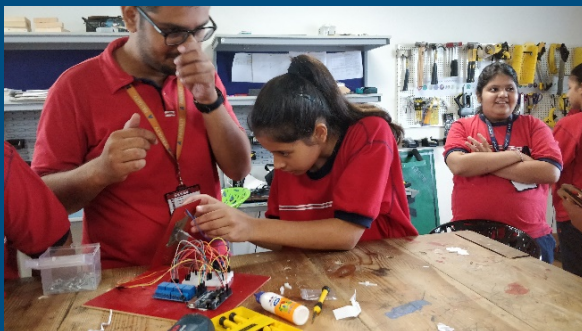
Step.1: Ideation and Design

Students brainstormed and ideated a Solar Tracking Device, a device that monitored the movement of the Sun and displayed which of the five times of the prayer it was as per the faith of Islam. The project had the components of both Digital and Physical Fabrication.



Step.2: Programming

For the Solar Tracking Device to effectively work, students had to figure out the perfect code. Students used sensors and wrote the code on Arduino IDE software.



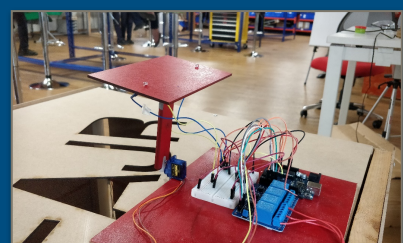
Step.3: Physical Fabrication

Students used wood working tools to build a Display Cube that was connected with their Solar Tracker Device.



Step.4: Final Project

Students completed the project by testing their Solar Tracker and then connecting it with the Display Cube.



Enrichment Program

As a part of their Enrichment Activity inside the Maker Space, students engaged in making Pin Boards and Display Shelves to showcase their work. Both the activities were completed by Primary Grade students and the final products look nothing less than amazing.

Pin Boards



A.Measure and Cut



B.Cover it up



C. Pin Boards are ready!

Display Shelves

