



This is an external club which will be run by Mrs Sagar in the STEM building.

Complete session / term / year planning

- Each session is a new project. We time it to make sure it is possible for the children to finish within an hour.
- Each term we create a set of 12 new projects to make sure children always have something interesting to do. At the moment we have 72 projects scheduled to make sure even children attending the STEM club for a long time are never bored.
- We try to cover as much of the primary school science, DT and maths curriculum as possible.

The overall session plan is as follows:

- Each session starts with a discussion of the science principles behind the project selected for this session. The idea is to guide the children with the right questions instead of telling them outright. We strongly believe this gives children an opportunity to share their knowledge with their peers and through that learn to value scientific knowledge.
- The main piece of every session is a project. And whatever children make, they take it home with them. We always try to strike a delicate balance between a challenge and feasibility of the construction for the children. That's why in the supplies pack you'll find certain elements already pre-cut / pre-drilled / pre-tied etc.
- While we guide the children through the construction, we use this opportunity to discuss engineering aspects of it.
- In every session we try to allocate some time for children to customise their creations, e.g. through colouring them.
- Each session ends with some kind of a testing.

Every term we prepare a new set of projects to cover new STEM areas and make it interesting for the children who continue to attend the club over multiple terms. For example for spring term 2023 we planned the following sessions:

- Animate a Roaring Tiny Rex Puppet (Living Things - Dinosaurs / Levers and Linkages)
- Greenhouse - Geodesic Dome (Living Things - Plants / Shapes and Structures)
- Spin Drum (Sound)
- James Webb Space Telescope Model (Earth and Space)
- Rubber Band Helicopter (Air Resistance / Gravity / Working of a Wing)
- Paddle Boat (Buoyancy / Elastic Potential Energy)
- Mother's Day Special: Chromatography Flowers (Properties and Changes of Materials)
- Gravity Powered Toy Car (Gravitational Potential Energy)
- Friction Experiment (Friction / Gravity)
- Jelly Fish in a Bottle (Compressible / Gasses / Incompressible / Liquids / Buoyancy)
- Pinhole Camera (Light)
- DIY Battery (Electricity)

Monday – 3.20-4.20pm

STEM Room

Cost £50 for Autumn Term

Club will start on Monday 16th September and will run on:

16th September, 23rd September, 30th September, 7th October, 14th October, 21st October, 4th November, 11th November, 18th November, 25th November, 2nd December and 9th December.