



STEM @

St John's



7th August, 2017.

During Term 2 our STEM programme continued with our lunchtime C.I.D's Club (Create Innovate Design Club) and lessons for students in K-2. The broad aims of the STEM project are to improve the students' uptake, engagement and achievement in the areas of Science, Technology, Engineering and Maths. The following information is a brief outline of what the students and staff have been involved in so far.

LET'S MOVE SOMETHING!

The Junior STEM challenges continued our focus on the key theme of **LET'S MOVE SOMETHING!**

The students have investigated marble mazes, marble runs and building with our new MakeDo construction kits.

The students have enjoyed the opportunity to work collaboratively to investigate and solve the challenges.



The STEM lessons provided opportunities to create a solution to a problem in a myriad of ways. There was a lot of testing and improving of designs. They have also learned that they may not get a successful outcome but that by sharing the ways their idea did not work helps others to improve and develop their designs.



C.I.D's Club

Create Innovate Design

During Term 2 our Wednesday lunchtimes were spent with students engaging in construction and Makerspace activities.

Students have access to recycled and repurposed materials to create and design. Much time was spent investigating various ways cardboard can be attached without using tape. After modelled lessons using the Makedo Kits students were keen to use their new building skills to construct their designs.



STEM Ultimate Golf Course Challenge Excursion



The students who have taken on the design challenge of creating a mini golf course hole have been attending weekly lunchtime sessions to work on their designs.

Students with iPads have been using the Padlet app to record their design ideas.

This app allows them to share their ideas amongst the groups' members and enabled them to work collaboratively on their designs. The app enabled the students to work on their project after school.

Golf Course Challenge Excursion



One of the highlights for the regular attendees was a research excursion to the Laser Tag Mini Golf course in Albury. The students were able to study the design, investigate the obstacles and challenges of the various holes. The students had a question and answer session with the owners. This gave the students an insight into the design process. It was a very hands-on session with lots of measuring, discussion and learning about scale when drawing plans.

A big thank you to Laser Tag Mini Golf for supporting our students in their STEM learning.



What's next?

During Term 3 there will be a lot of STEM activities happening. Students in across all year levels will be involved in the fortnightly STEM lessons. C.I.D.'s Club will continue to run on Wednesday at lunchtime in the STEM room. The students who have shown an interest in STEM and regularly attend C.I.D.'s Club may also be invited to be involved in some possible excursions and guest speaker activities where they will learn about the real world applications of STEM knowledge and skills. This may not happen due to our already busy school schedule and the fast approaching STEM Showcase Day.

STEM Showcase Day

The highlight of this Term will be our STEM Showcase Day which will be held in the hall on **Thursday 31st August**. The day will involve STEM activities for students across the all year levels. There will be three main aspects to the day.

Firstly the students who have spent the year researching, collaborating, designing and building their mini-golf courses will have them on show for students and parents to view. We are hoping to build three of the designs over the coming weeks and have them ready to play on the showcase day.

The second aspect is the Take Home Challenge component. Students will have the opportunity to complete a Take Home Challenge activity in the weeks leading up to the Showcase Day. The Challenge will be completed at home and parents and family members can work alongside the students to complete the challenges. There is a **Kinder -Year 2 Challenge** and a **Year 3-6 Challenge**. All details regarding the Take Home Challenges, including the design journal sheets will be available as an attachment to the KIT as well as in paper form.

The third aspect of the day will be the Class Against Class STEM Challenges. This will occur in the middle session of the day. It will be a very interesting and hands-on problem solving engineering design task that the students will have to complete in a set time frame. It should be a lot of fun!

The day will conclude with students sharing their designs in a whole school showcase session.

A detailed timetable of events will come out closer to the STEM Showcase Day.

STEM Showcase Day Parent Help

There are many ways parents can assist our students and our STEM program leading up to the **Showcase Day**.

- Encourage your child to complete the **Take Home Challenge** - available on-line
- Send in materials to school to use for construction activities in the STEM program - fridge boxes, masking tape, cardboard tubes/cylinders, rope, plastic wheels, pulleys
- Come on the day to lend a hand
- Help build the mini-golf course holes. This will begin on **Tuesday 22nd August**
- Be a guest speaker - be available for students to talk to you about how you use the STEM subjects in your work

Contact Mrs Therese Schmidt or Mrs Louise Kotzur

