St Margaret's celebrates Science Week

National Science Week is Australia's annual celebration of science and technology held each year in August.

This year, St Margaret's secondary students celebrated the science all around us and in everything we do with a weeklor series of workshops, science-based competitions, lunchtime drop-in sessions and after school events held between 17 a August.

During the week, Years 11 and 12 students participated in a Rocket Competition on Circular Drive launching their rocket plastic bottle filled with a 2:1 ratio of oxygen and methane by igniting the mixture with a lit splint to the neck of the bottle. Targets were setup and students were given the chance to adjust the height of the rocket launcher. The rockets took off v loud bang and flew for several metres with the farthest rocket taking out the competition.

"That was so exciting," said School Captain Alice O'Driscoll after completing the challenge.

The Physics, Biology and Chemistry student said: "We've looked at this chemical reaction in Chemistry but we've never s in practice, so it has been very cool to see that today."

Strong westerly wind gusts provided an external variable for the rocket launcher experiment and Alice adjusted her launc strategy accordingly.

"I thought a launching pad set to 45 degrees would be the best bet. I had taken note of the wind and noticed the rocket launched before mine swung to the left, so I shifted the launcher more to the right," Alice said.

Among other activities during the week was a physics investigation about energy transfers, where students were required simulate a bungee jump using a barbie doll and rubber bands.

The Bungee Jumping Barbies challenge required girls in Years 10 to 12 to work together in groups to make a bungee cor their barbie by stringing together rubber bands in a chain. Teams had to estimate how many rubber bands they would ne give barbie a thrilling bungee jump from the top level of Avoca building, through the ring of fire (or in this case, a hoop decorated in red and orange crepe paper) and just touching the target of a bowl of jelly below.

Year 11 students Zara Campbell and Ashleigh Pomeroy said the challenge involved a lot of trial and error to work out hov many rubber bands would be needed.

"We had to try and figure out how much barbie would rebound up, so we did a few tests beforehand.

"We also had to consider the gravitational energy because as barbie fell, she gained speed," Zara said.

Head of the Science and Technology Faculty Mr Chris Dunn said St Margaret's science week celebration was aimed at increasing science engagement levels.

"The aim of Science Week at St Margaret's is two-fold. The first is to raise the profile of science and technology at St Margaret's. We are a school that aspires to be one of the leading girls' schools in Australia for Science and Technology. Therefore, our promotion of events such as Science Week forms an incredibly important part of the narrative we are setti the students. Secondly, it is a chance for our teachers, and in some instances external providers, to inspire and engage c students with science and technology workshops and activities outside the classroom.

"It's a fantastic opportunity to showcase the amazing outcomes achievable in these fields and the opportunities possible girls' futures.

"At the moment, Australia is suffering an alarming shortage of tertiary graduates in STEM-related fields, and the figures f female graduates are worse still. Our Faculty sees events as such as Science Week as perfect opportunities for us to en and inspire our students with activities in Science, Technology and STEM-related fields. It forms a vital part of the Scienc Technology co-curricular offerings at St Margaret's, which are intended to develop our girls' interest and confidence in ST subjects.

"It seems to be yielding excellent results. Since 2018, St Margaret's has seen a significant increase in the enrolments of students across Senior Science and Technology subjects: Biology (increase of 21%); Chemistry (increase of 11%); Phys (increase of 27%); Digital Solutions (increase of 52%).

"There are currently more students studying Science and Technology than any other time in St Margaret's history. In 202 upward trend continues," Mr Dunn said.