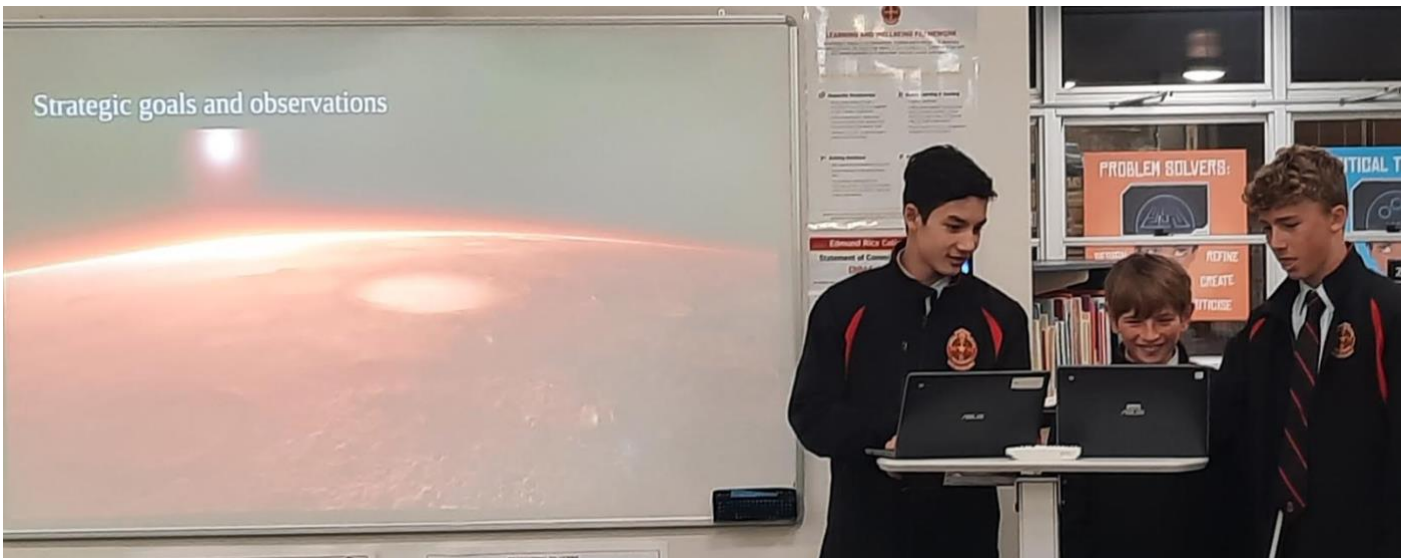


Year 7 Enrichment Mission to Mars PBL (Project Based Learning) Experience

On Tuesday 23rd and Wednesday 24th August, Year 7 enrichment students participated in a rocketry themed Project Based Learning program. It combined theory from the mathematics and science departments as well as practical experience in launching some rockets!

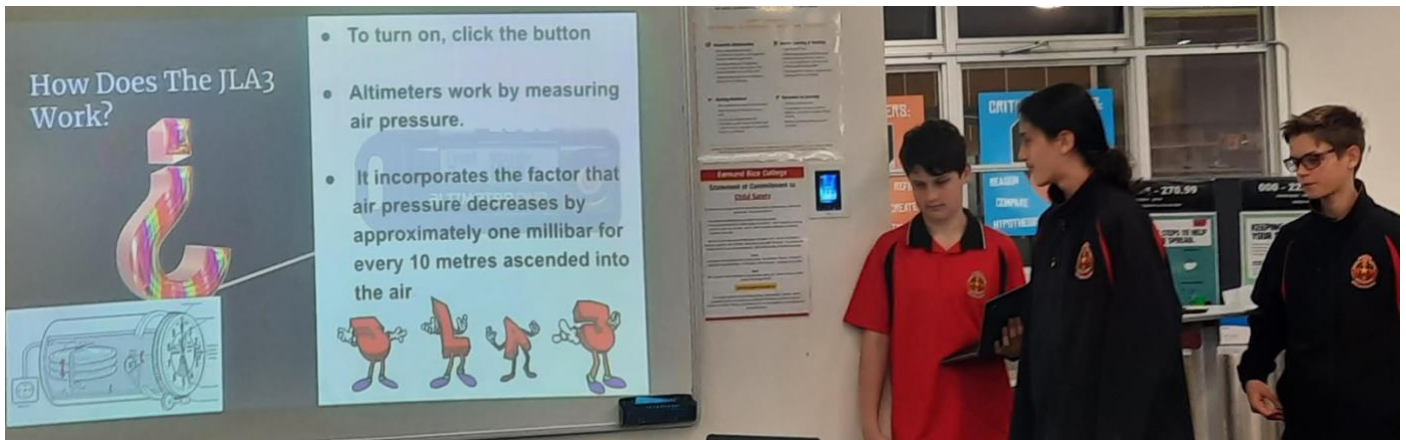
The previous week, students were assigned groups ranging from 3-4 people to work on the "Mars Mission Proposals". This saw the students researching the logistics of a theoretical Mars mission, and then compiling it into a presentation for the class and teachers. On Tuesday 23rd August the proposals were presented. The group with the most feasible mission and engaging/convincing presentation won the pitching contest.



In the mathematical component, students were placed into groups of 3. Each group performed different tasks relating to the flight of the rockets which would be launched on the Tuesday and Wednesday. These tasks included: Trigonometry to calculate the apex, altimeter theory, finding the apex with a photo taken from the rocket, and finding the apex with a photo taken from the ground. The rest of the students would explore using online spreadsheets and algorithms to complete the task.



On Tuesday and Wednesday (23rd & 24th August), the main program kicked in. To begin with, on the Tuesday, students worked on the theory mentioned previously and also got to meet face-to-face with the Sydney University team who recently won a rocketry competition in New Mexico. The same day, the pitches were presented to the class. Adding onto this, 2 of the 7 rockets were launched. The first with aeronautical instruments to provide us with information to use in theoretical calculations.



On Wednesday, the second day, students continued with theory, as some of the mathematical groups presented their expertise to the class. As well as this, the rest of the rockets were launched; some more successful than others. Adding on to this, during the day, an Engineer by the name of Mr Dominguez came to talk to us about his story, sharing his experience and knowledge in engineering.



Overall, the Year 7 Students really enjoyed the PBL experience and the rocketry program altogether. The theory provided interest in the logical, fundamental parts relating to rocketry and launching the rockets was a great, fun experience for all of us.

Daniel Morozov Year 7

