## **Primary Maths Challenge 2022 - results**



Reception EDGE Group Suwani Jayasinghe, Brianna Teng, Olivia Wei, Keira Wang	The Day a Secret Message was Left	State Winning Entry	This project introduced reception students to code breaking through simple algorithms. The students were left a key made of different emojis and a series of encrypted messages that used numbers. They were given incomplete codes and challenged to work out the remaining parts using simple algebra. Using simple probability language, the students discovered the most commonly used letters in the English language and used ordinal numbers to assign places. This information assisted them in analysing further messages.
Year 1 EDGE Group Beatrice Binette, Alex He, Lemary Li, Grace Guo	Our Fitness Maths Project	State Winning Entry	The students gathered the data about favourite sports using a tally which they presented in a bar graph. Following research, they discovered they should be doing 60 minutes of physical activity daily and then calculated how much sport this would be for a week, month or year in minutes and hours. They used fitness trackers to see how much they actually moved in a week. They tried to predict their results and analysed data on the app to see how close their estimations had been. The students repeated their tests 3 times and calculated averages.
Year 2 EDGE Group Eva Ghai, Rania Gao, Amelie Tan, Jessie Zhang	Our Mathematical Thinking Comics	State Winning Entry	The girls were given the provocation of considering when their mathematical journey begun and presented the information in a timeline. They predicted the number of years they'd be a mathematician for and discussed the different type of maths that they had learnt so far. They collected the data from the Reception and Year 1 Teachers in a table and made a bar chart. From this data they each chose a different mathematical concept to create a comic book that would teacher younger students about Mathematics. Using the Pixton app they created worded maths stories as comic books.
Year 3 EDGE Group Amber Guo, Aimee Ju, Laura Lu, Samaira Soodan	Perplexing Planes and Magnificent Maths!	State Winning Entry	The girls used mathematics to investigate what aspects of launch and design impacted the flight length and duration of various models of paper planes. They tested gyrocopters, loopy aeroplanes as well as classic paper planes. They ran trials and compiled data tables of averages from the 3 flights of each type to compare factors such as the angle of launch of the planes, and the area and shape of the wings.
Year 4 EDGE Group Elise Fuller, Jessie Ju, Violet Tulloch, Charlotte Sproston, Charlotte Di Giorgi	Designing the Perfect Lunchbox	State Winning Entry	The students were given the provocation about the problem of lunch boxes. They researched lunch boxes and collected data about existing lunch boxes, measuring the different elements of a variety of lunchboxes. They calculated the volume of a cuboid and a cylinder. The girls designed what they believed to be the perfect lunchbox. They created life size plans of their designs that included measurements and volumes. Next they surveyed their peers to identify the lunch box design that they were hoping would be 3D printed. The girls had to convert from cm to mm and the 3D element meant that at times the girls were working upside down and inside out. The girls printed in a much smaller scale and worked out how much smaller their models were than the real life model.
Year 5 EDGE Group Bonnie Qu, Grace Marshall, Mathilda Begg, Sophie Edwards, Sasha Connor, Shruti Biradar	Dear Data	Highly Commended	The intention of this project was to provoke the students into thinking about the amount of data in the world, how we collect it, present it, view it and interpret it. In our initial investigation we came across the 'Dear Data' Project where 2 people who met at a conference but lived on opposite sides of the world, used beautiful data presentations to reveal aspects of their lives to each other. They sent these representations as postcards. The students then set about tracking an aspect of their lives and representing the data in a creative data postcard.