Maths Investigators

Years 1, 2 and 3 - Term 3, 2019

Fee $105

People throughout the ages and around the globe have conducted mathematical investigations to increase their understanding of the world and solve the problems they find before them. The Eureka *Maths Investigators* workshops will allow students the opportunity to discover there is far more to maths than just numbers as they are challenged, inspired and enlightened!

Trigonometrius and the Curse of the Pharaoh Polikhon *with Dimitri Douchin*

It's 2600 BC, and the architect Trignonometrius has been ordered by the Pharaoh Polikhon to build a pyramid as his tomb. Trigonometrius has never built a pyramid before, but merciless Polikhon threatens to curse him and his family for generations to come if he fails! Trigonometrius activates his magical time travel amulet to summon the bright minds of the future to help him solve his pyramid building problem. To be of assistance, we'll need to investigate square numbers and sums, and become familiar with the maths of triangles and pyramids by building our own models. Armed with all this knowledge, along with two monumental theorems of geometry (Pythagoras' Theorem and Thales' Theorem), we'll be able to deliver plans to Trigonometrius and save him from Polikhon's curse!

***Dimitri** has travelled from France where he studied physics to Australia where he graduated with a PhD in Astronomy and Astrophysics. He then shared his passion for the wonders of space and the Universe with children and grown-ups as an educator at Sydney Observatory. Since then, Dimitri has devoted his time to helping children and adults understand themselves and the world around them in a fun and meaningful way.*

Where in the World is Waldo? *with Kate Parker*

Back in 2017, the most expensive piece of artwork on earth went missing – Da Vinci's Salvatore Mundi, worth four hundred and fifty million dollars! It was rumoured to have been stolen by notorious art thief, Waldo Woodward, but even after being arrested he refused to give up the location. Now, though, Waldo has escaped from Long Bay Jail, and Interpol need some brilliant cartographers to track him across the globe. If you find Waldo in time, he will lead you to the missing artwork – but if you don't, he'll go into hiding and the artwork will once again be lost… perhaps forever. Be prepared to use your mathematical investigation skills to uncover the whereabouts of Da Vinci's masterpiece, encountering cryptic clues and mind-bending brain ticklers along the way. You'll learn to apply mathematical concepts such as Pascal's Triangle, conversions and algebra – can you beat the clock, capture Waldo and retrieve Salvatore Mundi before the workshop is over? Good luck, sleuths!

***Kate** is a writer and science content communicator with a passion for critical thinking and teaching the scientific method. As an experienced gifted and talented program developer, Kate has made it her mission to foster inquisitiveness and logical thought in children. She has worked in several industries as an accountant, business owner and educator and is excited about encouraging young minds to think outside the box and develop a process to problem solve.*

3D Modelling Mayhem: Saving a Seriously Squashed City *with Sappho Dalziell*

What's that rumbling noise? Oh no… it's a pack of giants! You manage to get out of the way as the huge feet hurry past, flattening every structure in their wake. What a mess! The city has been squashed beyond recognition. The mayor calls on you and your team of geometry and architecture experts to rebuild this splattered metropolis and return it to its usual pristine state – but the original plans have been lost in the destruction. You'll need to use your visualisation skills, observe and record how 3D models look from different perspectives, and recognise different patterns and shapes in order to draft the architectural plans for the builders to get started from – and then maybe improve them with some creative designs for brand new buildings!

***Sappho** is a vibrant, energetic primary school teacher who has a wealth of experience implementing an interdisciplinary approach to teaching across subject areas. She has completed her mini Certificate of Gifted Education and is passionate about enrichment opportunities for students. Sappho thoroughly enjoys designing exciting, interactive and stimulating learning experiences which ignite interest, spur creative and critical thinking, and encourage problem solving.*