

The BRAINWAVES Club

Term 1 2021: Neutrinos – Years 5 and 6

Venue: Alphington Grammar School

Term Fee: \$285.00

Cinematic Science

New York might have Broadway, London may have the West End, and Los Angeles might be a movie-making hub, however this semester Alphington has its own theatrical epicentre, the Brainwaves Club! Movie and theatre buffs, join the Neutrinos as we shine a spotlight on science to discover how special effects help create 'movie-magic' and keep the show rolling on stage and screen. Each meeting, you will expand your scientific skills by **discovering** new information, **applying** it in hands-on activities and **creating** something to reflect your new movie magician status.

6 February

Meeting 1: Aaaaand We're Rolling

Focus: Optics and Chemistry

Neutrinos it's your turn to shine in the limelight. In this session, we will illuminate the science behind stage lighting and explore how chemistry and 'optics', the branch of physics concerned with light, both contribute to bringing colour to dimly lit stages and cinemas. During the session, the Neutrinos will flex their scientific thinking skills to explore luminous coloured flames.

20 February

Meeting 2: Simon Says Stop

Focus: Technology and Mathematics

A stop motion movie like Wallace & Gromit or Chicken Run takes in excess of a year to film! That's about one second of footage per production day; let's see what we can achieve in this session when we create our own stop motion animations with different materials. Along the way, we will put on our mathematical thinking caps to discover how maths and animation go hand in hand.

***If you have an iPad or tablet please bring it along with the free Stop Motion Studio app downloaded**

20 March

Meeting 3: We're Off to See the Wizard

Focus: Physics & Atmospheric Science

Lions and tigers and bears, oh my! L. Frank Baum's The Wizard of Oz has dominated stage and screen for many years. Join us in this session, as we recreate the eerie forest from the play using a little help from science. Look out though; the wind is picking up. I think a twister is brewing. Neutrinos, hold on to your hats as we create an actual indoor tornado, learn about the properties of dry ice and reveal how temperature influences weather patterns.

27 March

Meeting 4: Out of This World

Focus: Technology & Astrobiology

No sci-fi film would be complete without a set that immerses viewers in another time and place. So, get ready Neutrinos, prepare to be transported to another world! Thanks to science led advancements in technology, we don't even have to leave the room. In this session, we explore green screen technology and whether life exists in the cosmic ocean beyond our little planet. To test this theory, we will examine Martian soils for signs of life. You never know what we might discover.

What to bring

Each week please bring a well-stocked pencil case including:

- Scissors
- Pens and pencils
- Textas
- Sticky tape
- A glue stick

About the presenter

Jesse Chambers is a science educator who provides exciting learning experiences that seek to satisfy highly able students' appetite for knowledge. He has a double degree in science and education with honours and has recently completed a Master of Science Communication Outreach. Since joining G.A.T.E.WAYS, Jesse has delivered workshops spanning astronomy to zoology. He has a strong passion for inspiring students to learn about science and looks forward to joining the Neutrinos on their quest to become movie magicians!