



Term 1 2021: SciSpies Club – Years 1 and 2

Venue: Canberra Girls Grammar School, Grey Street, DEAKIN

Term Fee: \$285

The World is Alive with the Sounds of Science

We all know the world around us is full of science – in how the earth beneath our feet is moulded, in how our eyes see it, in how we and other creatures can be identified among many other phenomena.

This semester the SciSpies will get in tune with ticking timers, swishing air-borne seeds, crunching catapults and zooming neural pathways – and see how it all comes together in a glorious symphony of science!

Meeting 1: Our Ever-Changing Landscape

Focus: Environmental Science

Gurgle, burble, swish - have you ever played with water in your backyard, pouring it over dirt and rocks only to notice little rivers forming natural waterways as the soil is moved? Erosion has helped to form many of the interesting features of the Earth's surface that we see today, such as majestic mountain peaks, cavernous valleys and craggy coastlines. But how long does this take to happen? Depending on the type of force, it could happen quickly or take thousands of years! We only have the afternoon - can we accurately simulate the wonder of erosion for ourselves? The SciSpies are going to find out!

Meeting 2: Brainwaves Explores Brainwaves!

Focus: Psychology

Zip, Zap, Zoom! That was a message travelling at super speed to one of the hemispheres of our brain – either the left side or the right side. What's the difference? What are they used for? Is there a side that people use the most? What happens when part of your brain gets damaged? And which critical function do we all use every day that can be improved by exercise? The SciSpies will explore these neuroscientific conundrums and more in this afternoon's meeting.

Meeting 3: Now You See It, Now You Don't

Focus: Biological Science

I spy an optical illusion with my little eye – but wait! Do you really spy it, or are your eyes actually playing tricks on you? Afterimages are the pictures left on your retina after you stare at an object and then look away. Your brain has fascinating ways of processing this information taken in via sight! How does it differ for people who are colour blind? Today, club members will explore the science behind illusions and understand the processes involved in the brain interpreting the messages it receives. Can you believe your eyes?

Meeting 4: Time Telling Over Time**Focus: Scientific Methods**

What's the time, Mister Wolf? Mum, how long until we get there? What was your personal best time for cross country? Sometimes our lives feel like they revolve around measuring seconds, minutes, hours and days (among other things)! Just a few hundred years ago, our ancestors did not have any of the conveniences that we use today – no watches, clocks, smart phones or digital displays - yet they found ways to tell the time. But how? Today, members will test alarms, some interesting clocks and other time keeping devices used in the past for their accuracy and ease of use. Could we improve on their design? The afternoon will tick by in a flash!

What to bring:

- A well-stocked pencil case (this includes grey lead pencils, coloured pencils, coloured textas, sharpener, eraser, ruler, scissors & glue stick)
- A notebook

About the Club Leader: Chelsea Glenn

Chelsea is a committed educator who has taught in a variety of school settings to provide authentic and engaging learning experiences for her students. She is experienced with the International Baccalaureate, Primary Years Program Framework. Chelsea is passionate about facilitating learning through hands-on experiences that encourages creativity and higher-order thinking. She believes that learning is a lifelong process and encourages others to continuously ask questions to make sense of the world. Chelsea enjoys participating in charitable events to raise awareness for different causes and gains a great sense of personal achievement when helping others. She is also passionate about environmental conservation, health and nutrition.