

The **BRAINWAVES** Club



Term 3 2021 | SciSpies | Years 1 and 2

Venue: Canberra Girls Grammar School - Junior School, Grey St Deakin

Term Fee: \$285

Meeting 1: Houston, We Have a Challenge!

Focus: Earth & Space

Our solar system is incredible! Scientists continue to make new discoveries and advancements in the field to bring us closer to the age-old question, 'is there life out there?' Each year, we celebrate our birthday with a full rotation around the sun. But how old would we be if we lived on different planets? It's time to find out! This meeting, the SciSpies will investigate just how big our solar system really is as well as the features that make each planet unique.

Meeting 2: Structure & Functions of Ecosystems

Focus: Biology

Nature is all inspiring! Different organisms rely on each other to survive, so what happens when this delicate balanced is thrown off? How do plants, animals and the environment interact and work together? We will explore a range of marine and land-based ecosystems around the world, and find out about their structure, functions and commonalities. We will learn about a range of factors in our ever-changing world that put unnecessary pressure on these organisms to adapt or face the risk of extinction, including human influence, global warming, genetic issues and extreme weather. We will apply our knowledge when constructing balanced terrariums to take home and remind us of just how amazing and precious our natural world is.

Meeting 3: Metal Madness

Focus: Chemistry

Metal is a useful material that can be used in lots of different ways due to its many excellent properties, such as strength, toughness, and stiffness. When heated, metals can be shaped into anything from a tiny paperclip to a huge aircraft. They are also fantastic conductors of electricity and heat. But surely a product this good must have a weakness, right? In this session, SciSpies will engage in a variety of experiments to predict and observe the way that different materials interact with different metals. How does metal respond when faced with heat, magnetism or acids and bases? Let's find out together!

Meeting 4: Growing Our Future

Focus: Agriculture & Sustainability

Have you ever wondered about the journey that different types of foods go through on their way from crops to shops? Some go through processes which can impact imbalances to ecosystems. Every day, the agriculture industry continues to face increasing environmental pressures. So, what does the future of farming have in store for us? This meeting, the SciSpies will discover the different ways the Agronomists grow produce around the globe before exploring technological advancements in the industry and designing their own inventions to keep up with our ever-changing world.

What to bring

Well stocked pencil case with writing pencils, sharpener, rubber for edits, coloured pencils and Textas, scissors and glue stick.

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.