

# The **BRAINWAVES** Club

**Term 1 2021: SciSpies – Years 1 and 2**

**Venue: Brighton Grammar School**

**Term Fee: \$285**

**13 February**

**Meeting 1: Enzyme Time**

**Focus: Biochemistry, Scientific Method**

Sometimes it pays to exceed the speed limit... when you are a chemical reaction that is! Enzymes speed up reactions when things go a little slow. As you will discover, these marvellous molecules are like puzzle pieces that match with others to complete reactions. Today we will complete hands-on experiments to learn how enzymes hold the key to speedy science.

**27 February**

**Meeting 2: Sunny Side Up**

**Focus: Environmental Science, Renewable Energy**

Did you know that the sun sends more energy to the earth in just one hour than the whole planet needs in a whole year! Wow! This renewable energy source can be used directly for heating and producing electricity. Speaking of heat, food's up! Today SciSpies will make their own solar oven that can be taken home to cook up a storm - well maybe not quite a storm - maybe more of a sun shower! In this meeting our young scientists will investigate how this bright alternative can be used to power our cities and more.

*Requirements: Please bring a small cardboard box (shoe box or similar).*

**13 March**

**Meeting 3: I Like to Move it Move it**

**Focus: Physics, Scientific Method**

Many years ago, Sir Isaac Newton made some particularly good observations about motion and these formed the basis for his three laws of motion. Today SciSpies will explore Newton's First Law of Motion as they investigate 'inertia'. In this meeting we will conduct some cool experiments to show that objects have a natural tendency to resist change in their state of motion and will keep doing what they're doing unless acted on by another force.

**20 March**

**Meeting 4: The Blood Bank Think Tank**

**Focus: Biology**

Blood typing is as easy as ABO and the doctors at the G.A.T.E.WAYS General Hospital need your help! Today SciSpies, you will be responsible for identifying the correct blood type for each patient using

your powers of deduction. Are you ready to make an urgent blood delivery? As you will explore, blood plays an important role in keeping us healthy and protecting us from immune intruders.

**What to Bring:**

Each week please bring a blank A4 notebook and a well-stocked pencil case including;

- ✓ Pens and pencils
- ✓ Scissors
- ✓ Sticky Tape
- ✓ Glue Stick

**Club Leader: Scott Ho**

Scott is a primary STEM and visual arts teacher who enjoys helping children learn through investigative processes. He has recently finished his double degree in science and education with Honours. Scott is often described as a nerd burger and is keen to share his enthusiasm with children. Crystals and minerals were his spark in science, and he hopes to spark curiosity and interest in science within the SciSpies in 2021.