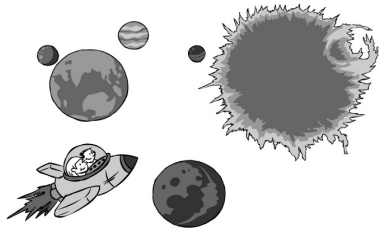


THE BRAINWAVES CLUB



Semester 1: SciSpies – Grades 2 and 3

“A JOURNEY THROUGH TIME”

This Semester the SciSpies will become time travellers as they take a Journey to explore our world from its very beginnings. Each session we will investigate a different topic in an area of science, mathematics or technology. Together we will explore new concepts, participate in fun experiments, get creative, play games and of course, make new friends!

SESSION 1: “Star Light, Star Bright?”

(Focus: Astronomy)

Have you ever wondered where our own Earth and the other planets in our solar system came from? At the beginning of time the material that made these planets swirled through space and eventually formed the planets that orbit our sun. Today we will learn all about the Big Bang Theory and then we will do an experiment to help us understand why the planets in our solar system are so bright in the night sky. Come and join us as we set off on our travels!

SESSION 2: “Bang, Crash, Pow, Kaboom!”

(Focus: Earth Science)

This meeting the SciSpies continue their journey as we learn about plate tectonics and its effect on the Earth’s crust. We will learn how earthquakes, volcanoes and mid-ocean ridges are formed and then the club members will create their own “plate game” all about the Earth’s crust.

SESSION 3: “Itsy, Bitsy, Teeny, Weeny”

(Focus: Botany)

This session the time travelling SciSpies will visit the Earth at a time when life began, 3.5 billion years ago. Back then the atmosphere was filled with poisonous gases, the sky was pink and the sea was rusty-red. The first living things were bacteria. These tiny organisms were made of cells. Today the SciSpies will investigate cells and create a model of both an animal and a plant cell.

SESSION 4: “Bzzzzzzzzzzzzzzzzzz!!”

(Focus: Zoology)

With oxygen in the atmosphere, life on Earth could really flourish. It began in the ocean. Then 440 million years ago the first life forms appeared on land - simple plants. With this change came the earliest land animals including insects. This session the SciSpies will travel to the insect world to find out all about these creatures. We’ll consider whether they are all just annoying pests or whether they play a vital role in keeping our ecosystems well balanced. Members will also make model of an insect.

SESSION 5: “Bones, Bones, Bones”

(Focus: Palaeontology)

Today we travel forward in time from last session to when the first amphibians appeared 350 million years ago and, following that, reptiles and dinosaurs. We know all of this because paleontologists have found the remains of these different types of creatures. SciSpies will learn how fossils are made and make one of their own.

SESSION 6: “Careful! The eggs are in that bag!”

(Focus: Biology & Engineering)

Birds evolved from small meat-eating dinosaurs. Fossils show that some of these dinosaurs even had feathers. Today the SciSpies will investigate birds and the adaptations that have allowed them to survive and thrive on Earth. We will then discover how the molecular structure of an eggshell can affect its strength. **BRING: a pair of nail scissors**

SESSION 7: “You look just like your Dad!”

(Focus: Genetics)

At last we travel to a time just over 100,000 years ago when modern humans first appeared. All people on Earth today are members of the Homo Sapien family. Today we will learn about heredity and genes and the difference between phenotypes and genotypes.

SESSION 8: "Walk like an Egyptian"

(Focus: Technology & Maths)

People who look for evidence of ancient human life and civilizations from the past are called archaeologists. Amongst the most important archaeological discoveries were those made in Egypt - evidence of a civilization well advanced in technology, science and the arts have been uncovered in years past and those discoveries continue right up to the present. Today the SciSpies will learn about Egypt. We'll investigate the principles of pyramids and why they are such enduring structures.

What to bring

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

- Scissors
- Good textas
- Pens and pencils
- Sticky tape
- Glue stick



About the presenter

Kirsten Dennis is an experienced teacher with a Masters of Education, specialising in Gifted and Talented Education. She has been working with advanced learners in a primary school setting for the past year and has a great passion for Mathematics, Science and Technology. Kirsten aims to provide fun and exciting sessions that extend her students' innate love of learning.

