



G.A.T.E.WAYS

invite gifted & talented Year 1 and 2

children with a love of science to

'It's Sense-ational!'

G.A.T.E.WAYS is an independent organisation offering challenging and enriching activities and experiences to develop and extend highly able children. Established in 1994, G.A.T.E.WAYS runs a range of stimulating school programs as well as the *Saturday Brainwaves Club*. This *JOURNEY* for both girls and boys will run over four sessions. Without your five senses you would be completely unaware of your surroundings. Your brain requires information from special body sensors which it then uses to create mental images and sensations of the world around you. All of the information you receive from your environment comes to you via our senses – sight, hearing, taste, smell and touch. In this Journey you will undertake a wide range of tasks, including hands-on activities and exciting experiments as we explore the five senses. There will be lots of action, prediction, observation, discussion, and above all, fun!

Requirements:

* Bring an A4 ring binder with paper; plastic sheet protectors; coloured pencils or Textas; morning tea (no nuts please); a small photograph of yourself to the first day – to be returned with your report; a stamped, self-addressed DL envelope for your report. Bring a hat in Term 1 /4.

PLEASE NOTE: In session 3, students will participate in a taste challenge using various fruits and/or vegetables. If your child is allergic to any foods, please advise G.A.T.E.WAYS ahead of time..

The Eyes Have It

Our Journey begins with the eye, one of the most complex and amazing organs in the human body. In this ex-*sight*-ing session you will learn about the structure of the eye, how it works to detect light, shade and colour, and how it can transmit this information to the brain. Hands-on activities and some tricky optical illusions will help you understand how your eyes and brain work together to create sight.

Let's Hear it for the Ears

In this session you will explore the awesome auditory system. Discover what sound is and how it can be measured. Learn about the structure of the ear, and how it detects sound waves and translates them into messages for the brain. Finally, today you will test your hearing with some exciting experiments! Use a balloon to amplify sounds, and make a spoon ring like a bell... You won't believe your ears!

A Taste of What The Nose Knows

Have you ever noticed that food tastes different when you have a cold? Although taste and smell are separate senses, they are closely linked. Today you will learn about the organs and receptors involved in tasting and smelling, and explore the relationship between these two senses. Challenge your taste buds to identify different foods – can they do it alone?

A Touch of Good Sense

Your sense of touch allows your body to respond to pressure, texture, temperature and pain, and to communicate and bond with others. Today you will discover the various tactile receptors found in your skin and other tissues, and learn about how these receptors communicate with your nervous system and brain. You will explore different textures and sensations in a blindfold challenge and discover just how sensitive your sense of touch is. The answers are at your fingertips!

Homework Requirements & Assessment

Between sessions students may be asked to do some homework. At the end of the program a short, written report will be completed on each student and forwarded home to parents. A copy should be made and forwarded to the school

ABOUT THE PRESENTER

Bobbie O'Brien completed her undergraduate Bachelor of Arts/ Bachelor of Science degrees at the University of Melbourne in 2006. In 2007, she completed an Honours degree in the Developmental Epigenetics Laboratory at Murdoch Children's Research Institute, and went on to attain a Master of Philosophy degree in the same group in 2010. Bobbie is also a qualified primary school teacher, having completed her Diploma of Education in 2012. She is passionate about science and education and enjoys combining these passions with G.A.T.E.WAYS