

G.A.T.E.WAYS has pleasure in inviting gifted and talented

Year 1 and 2 children to a 'Festival of Workshops'

hosted by Lauriston Girls' School, Huntingtower Road, Armadale

TUESDAY 13 DECEMBER and WEDNESDAY 14 DECEMBER, 2016

9.30 am to 3.15 pm

PROGRAM	TUESDAY 13 DECEMBER	WEDNESDAY 14 DECEMBER
1	AM: Marco's Jungle Adventure PM: Fly For Your Life!	AM: Marco's Jungle Adventure PM: Fly For Your Life!
2	AM: Bubbles, Runs and Chooks! PM: Yikes! The Moon Is Closing in on Earth!	AM: Bubbles, Runs and Chooks! PM: Yikes! The Moon is Closing in on Earth!
3	AM: Origami with a Mathematical Twist PM: Motion in the Ocean	AM: Origami with a Mathematical Twist PM: Motion in the Ocean
4	AM: Who Says I Can't? PM: Mystery at the Museum	AM: Who Says I Can't? PM: Mystery at the Museum
5	AM: The Case of the Mysterious Bag of Shoes PM: Let's Go Fly a Kite!	AM: The Case of the Mysterious Bag of Shoes PM: Let's Go Fly a Kite!
6	AM: Minions on Mars PM: Up and Away	AM: Minions on Mars PM: Up and Away
7	AM: The Perfect Science Recipe PM: King Fu Panda Sensational Birthday Party	AM: The Perfect Science Recipe PM: King Fu Panda's Sensational Birthday Party
8	AM: In a Spin! PM: Tim's Top Ten Science Toys	AM: In a Spin! PM: Do the Monster Mash
9	AM: Insectopaedia PM: Bubbles, Balloons and Blasting Through Space	AM: Insectopaedia PM: Bubbles, Balloons and Blasting Through Space
10	AM: One Green Dinosaur Balancing PM: A Shadowy Story	AM: Tim's Top Ten Science Toys PM: Diced – A Game of Chance
11	AM: Around the Body in under Sixty Seconds PM: Diced – A Game of Chance	

Please choose one program only per day. Programs cannot be mixed and matched.

The fee is \$99.00 per day.

Please bring a notebook and a well-stocked pencil case with a grey lead pencil, coloured pencils, a capsule sharpener, ruler, bright textas, scissors and glue. Please also bring along any additional materials listed for your program.

Enrolment Procedure:

- 1. Go the G.A.T.E.WAYS website <u>www.gateways.edu.au</u> and follow the links to 'Parent Enrolled Programs' on the Home Page. Select 'Festivals'.
- 2. Click 'Enrol' next to Existing Account Holder OR 'Register' next to New Account. Please do not create a new account if your child has attended G.A.T.E.WAYS in the past.
- 3. Complete fields then click 'Continue to Program Selection'.
- 4. Check the box under 'Select' for the festival required, then 'Continue to Unit Selection'.
- 5. Select 'Enrol' for the days required. Only programs with availability can be selected.
- 6. Select a program and then 'Continue to Home Address'. Complete all fields and proceed to payment page.
- 7. If you require assistance please phone G.A.T.E.WAYS on 03 9894 2116

Enrolments open Monday, October 24.

YEAR 1 and 2 FESTIVAL WORKSHOPS

MARCO'S JUNGLE ADVENTURE with Tony Doyle

Intrepid adventurer, Marco is trapped in the deepest, darkest jungle of Peru, tangled up in some barbed vines. Danger lurks in all directions. It's a race against time! Marco needs help so that he can continue his mission... to save precious artefacts from destruction. The problem is that his arch enemy, the evil Dr. Kneval is on his way to steal them! Can you help? The only way to save Marco is to code a series of commands and conditions to enable Marco to complete all 36 levels of his jungle adventure. Adventures that increase in complexity as he progresses. Will Marco survive? Will he reach the precious artefacts in time and will he thwart his enemy? Bring a fully charged iPad with the Apps 'Run Marco' and 'Blue Bot' loaded and opened prior to the workshop.

FLY FOR YOUR LIFE! with Sue Sturges

Every year, thousands of creatures all over the world migrate at the change of season. Over a lifetime, the flight of some birds can add up to the equivalent of three trips to the moon and back! In this workshop, we will explore what motivates so many different types of creatures on our planet to travel long and dangerous distances to be somewhere else. Join us as we explore many fascinating questions such as: how do these creatures travel? what triggers their decision to leave and do they intend to return? If they do, which place do they really call 'home'? How do they know which direction to travel? What special things do they need to pack? What are your own daily, weekly, monthly and yearly migration patterns? So many questions... so much interesting information to explore!

BUBBLES, RUNS AND CHOOKS! with Eugene Routman

Have you ever wondered what it would be like to have your maths and P.E classes combined? Wouldn't that be totally awesome? Well, our bubbles, runs and chooks workshop offers exactly that! You will learn and develop your mathematical skills through fun and engaging activities that involve running, bumping, dodging and even saving chickens! All our games involve scoring; hence it is up to you to calculate some complex scores to identify the winners. Will it all add up on the day? *Wear comfortable, sports clothing.*

YIKES! THE MOON IS CLOSING IN ON EARTH with Herwig Waldhuber

Imagine that the Moon is moving closer and closer to Earth! Yikes! Is it bigger and brighter? Do our nights have any darkness left at all? What effect does the extra light have on our plants and animals? And what will ultimately happen to the Moon? Could it really crash into Earth? In this workshop we will investigate the effects of lunar gravity upon the Earth and explore how the Moon stays in orbit. Find out what happens when the Moon enters the Roche Limit. You'll need lots of imagination for this workshop, so be prepared to think big and bold!

ORIGAMI WITH A MATHEMATICAL TWIST! with Anne Eastaugh

Join us on this mathematical exploration of the ancient art of origami. Have some fun and explore your mathematical and creative skills in this fascinating workshop. We will discover the mathematical rules that govern how paper folding works and look at the geometry and angles of crease patterns. Using the techniques of mountain and valley folding, we explore the shape and symmetry of origami stars, flowers and other simple designs. Once we have built up our confidence in some basic origami skills, we will practise these skills on more adventurous designs from a variety of patterns, to animals, and possibly even a dragon!

MOTION IN THE OCEAN with Jesse Chambers

Have you ever wondered how a message in a bottle sent from Australia can end up on the other side of the world in Africa? Or why rock pools host such a diverse array of sea creatures? Together, we will make a splash into science and explore how the moon and sea ice drive ocean currents, which in turn affects where different sea creatures live. You are guaranteed to be hooked on this oceanic adventure as we replicate sea currents by creating our own mini oceans. To top off our journey under the sea, we will meet some real-life rock pool specimens. This is sure to be a FINtastic adventure for budding marine biologists, geographers and science aficionados alike! *Please bring a glass jar with a lid to create our mini oceans.*

MYSTERY AT THE MUSEUM with Emily Taylor

Frauline Frankenfurter has been head curator at The Uber Fantastisch Museum for twenty-three years. Organised and fastidious, under the Frauline's reign not one single thing has ever gone wrong - or has it? Recently, strange sounds have been heard in the night, unpleasant residue found on artefacts and Frauline herself has been observed behaving...oddly. And now, to make matters worse, the museum's prize possession is missing! Join Detective Sauerkraut, Frauline Frankenfurter and an array of oddball characters, as we go undercover on an international mission to find the culprit, retrieve the missing object, and bring it back undamaged. Deploying acting skills such as movement, voice and team work, you'll need all your wits about you to avoid detection and to bring the guilty party to justice. Wear clothes suitable for movement. No skirts please.

WHO SAYS I CAN'T? with Layla Sacker

Have you ever felt really frustrated when someone has told you that you can't do something that you REALLY want to do? In his book *Don't Let the Pigeon Stay Up Late,* Mo Willems, has created a determined pigeon who has every reason in the world as to why he should stay up late. In this creative workshop, you will need to use all of your imaginative and persuasive powers to come up with something ridiculous that the pesky pigeon wants to do along with some brilliantly convincing arguments in support of them. Then again what if you had to persuade him that he shouldn't do these things? Could you create some equally convincing counter arguments? Be warned that pigeon is really persuasive and does not take kindly to not getting his own way. In this workshop you will need to use all your creative writing skills to publish his arguments and the counter arguments in the most creative way possible. You will be writing and illustrating a small book, where you might decide to have a go with some pigeon poetry or use speech bubbles as Mo Willems did.

THE CASE OF THE MYSTERIOUS BAG OF SHOES with Annette Subhani

Can you help? A mysterious bag of twelve shoes has been found at the Upwey Railway Station. Not a pair among them and what a strange collection they are: a single sparkly party shoe, a baby's bootie, a gumboot, a dance shoe, a red shoe just like Dorothy's...and more! Where has the bag come from? Who owns the shoes? Why would anyone take so many shoes and leave their pairs behind? Why hasn't anyone come forward to claim them? Is foul play involved? Well, the authorities have now been called in to solve this puzzle. Can you help? You'll need to use all of your problem solving and lateral thinking skills to unravel this mystery. There are not many clues to get to the bottom of this 'case' All we will have to go by, is an old tattered birthday card, a pile of train tickets and the shoes themselves. Come and join in the fun as we 'walk in someone else's shoe!' to solve the case!

LET'S GO FLY A KITE with Jo Baker

In this workshop, you will construct and decorate a Bug Kite that has been designed exclusively for G.A.T.E.WAYS. You will use your creativity to decorate a kite which is as individual as you are. We will then experience the thrill of flying our kites as we enjoy the wonders of the world of kites. We will bring along some of our kites to give you an idea of the many different shapes and sizes that will inspire you and we'll show you the principles of how to fly a kite. We also hope to cover some of the history of kites and give you plenty of ideas about designing and building your own kites at home. *Bring colourful textas.*

MINIONS ON MARS with Mel Jepson

As an Aussie Minion, you have decided to take a trip to visit the Minions on Mars. They are super-excited to see you but things are very different on Mars! You will quickly have to learn about their money system so that you can pay for your bananas, somewhere to stay and your rocket fuel home. Unfortunately, while you're out shopping and visiting some Minion friends, someone sabotages your rocket! Have you already made an enemy on Mars? Or, is there some other reason why someone would take a part of your rocket? Follow the clues and solve the puzzles to work out who it is, and WHY. Can you solve this mystery, fix your rocket and get home in time for the summer holidays? *Bring a well-stocked pencil case and a notebook*.

UP AND AWAY with Emma Carter

Have you wondered how a huge hot air balloon full of people can float UP and AWAY all by itself? What's holding it up and why doesn't gravity make it come crashing down to the Earth? Have you ever wondered why some things float but other things sink? And how is it that we can take some things that usually sink and make them float! Can you find a way to do it? Join us as we use ordinary balloons to investigate some of the extraordinary science behind things that float. This workshop will include lots of activities like building a hot air balloon powered by a hairdryer, and experiments that involve making predictions and testing our theories. You'll be floating on air after this workshop!

THE PERFECT SCIENCE RECIPE with Bobbie O'Brien

Do you like to cook? Do you like science? If you answered yes to both questions, then this is the workshop for you! Would you like to see a sultana dance, or discover why salt is the magic ingredient for making ice-cream? There will be plenty of hands-on activities to explore a range of science concepts including states of matter, forces and energy transfer. Discover how ordinary items from your pantry can be used to conduct awesome science experiments... with delicious results! *Bring writing materials, a notebook and an apron or art smock to this workshop.*

KING FU PANDA'S SENSATIONAL BIRTHDAY PARTY with Sharon Leibowitz

King Fu Panda sits under the old elm tree writing out the invitations for his twins Prince Lei and Princess Lei Lei's birthday party. How exciting - all young children who love maths are going to be invited! "Please come to Prince Lei and Princess Lei Lei's party. Our Zen Masters of Angles and Place Value will WOW you with their amazing and challenging games. The Court Jester will have you up and moving to the King Fu Panda dance. You'll have fun using numbers to draw fantastic creatures. There will even be a treasure

hunt with a heap of tricky mathematical clues. You could be in the running to win a week at the palace with Prince Lei and Princess Lei Lei!! Looking forward to meeting you all. King Fu Panda." Come to the party and join in the festivities! *Please bring a well-stocked pencil case and a notebook.*

IN A SPIN! with Mark Maxwell

The helicopter was one of Leonardo Da Vinci's most famous inventions, although it wasn't until 400 years after his death that the first helicopter was built using propellers. Although Da Vinci never actually built or tested a helicopter, his sketches and notes mapped out exactly how it would operate. In this workshop we will delve into the mind of one of the greatest engineers of all time as we explore flight and investigate how gears are used to create a working propeller. We'll write a computer program to make a motor spin and use worm gear designs to make your model helicopter, or aerial screw as it is also known, go really fast!

TIM'S TOP TEN SCIENCE TOYS with Tim Byrne

Do you love to tinker? Do you like experimenting and making things? Come along and make a range of toys that spin, fly, balance and amplify sound made from everyday objects and materials. Firstly, you'll be challenged to make and use the different toys. Then you'll use your observational skills to discover the science behind each one. **Bring a dry avocado seed and a cheap teaspoon to spin, as well as, a fork to ring like a bell.**

INSECTOPAEDIA with Adele Costello

Do you love creepy crawlies? Do you have a wealth of insect knowledge? Most of you will have looked at the life cycle of a frog or butterfly; but have you ever investigated the lives of the prehistoric insects? This workshop will focus on the discovery of some very old creepy crawlies. Hang on to the edge of your seats as we discover the ancient cousins of the ant, the huntsmen spider, the praying mantis and many more. Be amazed as we discover the much bigger prehistoric predators that regularly dined on these delicious insects. We will even get a chance to invent our very own 'scientific' discovery to add to the history books. *Bring writing materials*.

BUBBLES, BALLOONS AND BLASTING THROUGH SPACE with Allen Dickson

Everybody loves bubbles and balloons- they are a source of fascination and fun for children and adults alike. But bubbles and balloons hold many scientific secrets. Although it might seem that bubbles and balloons are mostly made of nothing, the scientific principles that hold them together have amazing connections with our planet and how we move through space. Light, gravity, tension and pressure all play their role in keeping us 'afloat'... removing or changing any one of these could make us 'pop' on a galactic scale!

ONE GREEN DINOSAUR BALANCING... with Rachel Holkner

There's a grey elephant going to see what he can see, the wheels on the boat are going round and round, and who on earth let that kookaburra run up the clock?! Gremlins have gotten into the music library and now everything's in a muddle! All the words are jumbled; we're just going to have to rewrite the whole songbook. Several well-known songs will be sung, rewritten and re-sung in this active program before we settle on the best creative new versions. We will look at rhymes and rhythms in traditional songs and poems, get silly with the lyrics and give our lungs a good work out. Once we've dealt with the cheeky gremlins, everyone will go home with an original new songbook to share with friends and family. There'll be a bit of writing in this workshop, some humming and clapping along (if you don't want to sing) and a whole lot of fun!

A SHADOWY STORY with Jackie Moss

Have you ever played with your own shadow? Have you had fun making crazy animal shapes on the wall with your fingers? Would you like to try some serious shadow making? In several Asian countries, beautiful handcrafted shadow puppets, made from dried buffalo skin, are used regularly to entertain and tell stories of good, bad and evil – and even romance and comedy! Using similar rods and mechanisms, you will make your own Indonesian inspired shadow puppet, and decorate it with shiny jewels and colourful drawings. Then you will enjoy casting your shadowy character behind a backlit screen, creating and telling your very own stories!

AROUND THE BODY IN UNDER SIXTY SECONDS! with Jo Davis

Did you know that your blood can travel around the body in under 60 seconds? That's how quickly it rushes through your arteries and veins, keeping you alive! In this workshop we will go on a mission to learn about blood and arteries, why the heart beats over 60 times per minute, and why the inside of your lungs could cover the area of a tennis court! We will use a microscope to discover the different types of cells in blood, find out why our blood looks red and explore how blood cells can protect us against getting sick. We will make models of some of the most important organs in our body and perform experiments to learn about gases in the blood, and even make some "fake" blood. This is one festival workshop that is guaranteed to get your blood pumping!

DICED - A GAME OF CHANCE with Justin McKenzie

Chance is the unknown, where something may or may not happen. The makers of games put much thought into what chance you are going to have of finishing or winning a game. Playing games with dice is lots of fun. Are you lucky when you roll the dice? How often do you win? If you play with a regular dice it is a cube, but did you know that die can also have 4, 30 or even 100 sides? What do you know about your chances of winning the games you play? We are going to see if we can improve our chances in games, if at all. After we have taken a look at a range of die, shapes and games in this fun workshop, you will have a greater understanding of chance and data. *Bring writing materials and a notebook*.

DO THE MONSTER MASH with Narelle Wood

Disaster has struck! The Monster Admission Sorting Software has crashed! It's the first day of Monster School and there are monsters everywhere, all of different shapes, sizes, colours, ages and scare-skills. It's now your responsibility, as head of admissions, to work out a system to sort these monsters into groups for their different classes. Don't worry though. Mr Linnaeus, head of the Monster Classification Task Force, is on hand with dichotomous keys, kingdoms and phylum information as well as some other classification tools. Will your classification system be able to properly sort the monsters into their classes ready for their first lesson? And will your sorting system be able to stand-up to the unexpected complication... the Monster exchange student?!

MEET OUR PRESENTERS:

Adele Costello has a double degree in Education and Arts. She is a current member of Victorian Association of Gifted and Talented Children's Committee. Her regular work with G.A.T.E WAYS has allowed her to combine her love of learning with her passion for watching highly able students make new and exciting discoveries.

Allen Dickson is an educator with a passion for ensuring learning is innovative, practical and enjoyable. For nearly 20 years he has specialised in the fields of Drama, English and Maths, and uses his diverse range of unique skills to initiate change in classroom practice. Allen runs his own educational consultancy, RethinkPD.

Anne Eastaugh is a mathematician, musician, writer and teacher. She has a Bachelor of Science with Honours in Mathematics and currently teaches first year maths at Monash University. Anne has taught many G.A.T.E.WAYS programs over the past ten years, using creativity and imagination to guide students through the magical, mysterious and beautiful world of mathematics. Anne is the author of The Peculiar Puzzles of Professor Fibbernacho.

Annette Subhani is an educator, a parent and a person of varied life experience with a passion and desire to contribute to the character development of children from an early age. She has been presenting with G.A.T.E.WAYS for over five years and she thrives on working collaboratively with children. Annette encourages students to question the world around them and to transfer their learning to real-life. She has a love of history, reading and literature, maths, story-telling, the arts and living life.

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. Bobbie is also a qualified primary school teacher, having completed her Diploma of Education. She is passionate about science and education and enjoys combining these passions with G.A.T.E.WAYS. Bobbie looks forward to returning from maternity leave for the December festivals.

Emma Carter has Bachelor Degrees in Science and Engineering, with majors in Physics and Electrical Engineering from the University of Melbourne. She has taught secondary school maths, science and physics and worked at Scienceworks. She has also worked as an outreach education officer for the Discovery Science and Technology Museum. Emma enjoys presenting science and mathematics workshops with G.A.T.E.WAYS.

Emily Taylor has over10 years theatre and television experience, Emily works as an actor, writer, voice artist, improviser and workshop facilitator. An award winning writer and performer, Emily has garnered critical acclaim with her solo theatre shows The Thick of It, Backwards, Pet, Cannonball (Best Solo Show NZ Fringe 2013 and Tiki Tour Ready Award Melbourne Fringe 2012) and Hello You (Green Room Award 2010). She has toured her work throughout Victoria, New South Wales, Queensland and New Zealand. Artistic Director of Melbourne Playback Theatre Company and a performer with Impromptunes, Emily also teaches theatre workshops with Melbourne Theatre Company, Malthouse, Drama Victoria, Arena Theatre Company and G.A.T.E.WAYS.

Eugene Routman's involvement in sport and education has always played a major role in his life. Eugene was inspired to establish Mathmatters when he taught a Year 7 math class and noticed students were disengaged with conventional learning, lacked confidence and motivation and as a consequence their results suffered. There were kids literally counting simple arithmetic equations with their fingers. Sport was found to be a great vehicle for providing kids with the opportunity to apply theory learned through having fun and being active.

Herwig Waldhuber is very interested in astronomy as well as the natural world. "Young minds should be opened to the wonders of the universe", is his motto. Herwig has run many successful G.A.T.E.WAYS programs on astronomy, science, history, geology, volcanoes, on aliens, on atoms and much more.

Jackie Moss has been involved in the visual arts industry for over 25 years with experience in graphic design, illustration and textile design. She has been commissioned as a mosaic artist, and has recently written and illustrated a children's book. She recently completed a Diploma of Visual Art majoring in oil painting. Jackie loves to see young minds inspired creatively, acquiring new skills and away from their screens!

Jesse Chambers is working toward a degree in science and education with honours. When not studying, he works as a wildlife educator; presenting programs about native animals to students across Australia. Jesse has a passion for inspiring students to learn about the world in a fun, hands-on way!

Jo Baker has been making and flying kites for the last 27 years. She has won the Australian Sports Kite Championships and was the 2005 World champion in the soft kite category. She has attended International Kite Festivals world-wide. She started Kites 4 Kids in 1995 and conducts fantastic kite-making workshops.

Jo Davis has over 15 years' experience in the lab, and is devoted to looking for a cure for cancer, and teaching. Joanne taught in the CSIRO Scientist in Schools program, and has conducted several Science G.A.T.E.WAYS programs. She has a passion for experimenting daily, whether it's in the lab, or in the backyard creating potions!

Justin McKenzie has a passion for mathematics and science and is keen to pass this on to his students. With his infectious enthusiasm, Justin will have students scratching their heads and questioning the seemingly obvious.

Layla Sacker is an artist, writer, teacher and literacy coach with over 25 years of experience teaching primary and secondary students and leading teachers. Layla has supported young writers in finding and publishing their own creative voices and stories through the medium of history, science, art and literature. She has worked with aspiring writers in creative writing programs in school and takes great delight in supporting and stimulating students to evoke feelings and express their ideas through their own writing.

Mark Maxwell is a builder, artist, technician and workshop presenter who has a giant studio to work his ideas. His practice encompasses sculptural marques, woodwork, animation, set design and lighting. When creating miniature models, he explores engineering principles and tries to design projects that promote open ended creativity. His creative process involves constructing working models from scratch and using technology to program basic functions.

Mel Jepson loves to learn, holding degrees in IT, Business and English Literature. She also loves to share that learning, having taught professionals, undergraduates, post-graduates, primary and preschool children. She has an IT/business background, as a programmer, a trainer, an internet business consultant and as a lecturer in electronic business.

Narelle Wood studied genetics and other fun science subjects like psychology at university. After turning her lab partner purple, she decided to follow a colourful career of teaching these subjects and often finds herself playing with chemistry in her kitchen. In the future Narelle aims to not dye any more people purple.

Rachel Holkner has a ridiculous imagination and is frequently off on one storytelling adventure or another. Sometimes several before breakfast! With a background in the arts and professional writing, she has produced short fiction and articles for many publications, reviews regularly for various websites and teaches history, creative thinking and writing with G.A.T.E.WAYS.

Sharon Leibowitz is an experienced educator who is enthusiastic about ensuring that learning is creative, practical and stimulating. She has specialised in the area of gifted education for over 20 years and has a passion for the development of Mathematical skills across the primary years. She particularly enjoys the task of designing mathematical curriculum using the 'thinking treasure' of children's literature and art.

Sue Sturges has long provided G.A.T.E.WAYS with an array of absorbing, topical programs designed to challenge, extend and enhance children's awareness and understanding of the world around them. She responds with warmth and humour to the demands of active young minds and gains great satisfaction from participating in students' development throughout their schooling.

Tim Byrne enjoys all areas of science he can get his hands on. Science is a way of looking at the world and trying to figure out what's going on, so every day brings another challenge to look further, deeper or differently. He likes to share his passion for science with anyone who will take the time.

Tony Doyle is a motivational and dynamic presenter who has been involved in education for the past 35 years. As a classroom teacher, ICT Coordinator, Deputy and Head of School, Tony has shown great interest in how children learn and has a real passion for Mathematics and Coding and their relevance and connection to today's primary students. Over the past decade he has published student and teacher texts

