

G.A.T.E.WAYS has pleasure in inviting gifted and talented
Year 3 and 4 children to a 'Festival of Workshops'

hosted by Firbank Grammar, Middle Crescent, Brighton

THURSDAY 12th DECEMBER & FRIDAY 13th DECEMBER 2019

9.30 am to 3.15 pm (registration 8.45)

PROGRAM	Thursday 12 th December	Friday 13 th December
1	AM: Sheriff Trigg FULL .. Problem Ponderosa (M) PM: Mirror, Mirr FULL Vall (S)	AM: Sheriff Trigger Nometry... Problem Ponderosa (M) PM: Mirror, Mirror, On The Wall (S)
2	AM: Ready, Set, (T) PM: Let The Forc FULL ou! (S)	AM: Wanted! Robot (T) PM: Ice Age 5 FULL (S)
3	AM: Disaster In The Lab! (P) PM: Up To The Highest Heights (S) (A)	AM: Disaster In The Lab! (P) PM: Up To The Highest Heights (S) (A)
4	AM: Prince or Im FULL oyal Genetic Mystery (S) PM: Magic Math: FULL (M)	AM: Prince or Impo FULL il Genetic Mystery (S) PM: Magic Maths FULL (M)
5	AM: From Panther to Purr & Wolf to Woof (S) (A) PM: The King's Messenger (P)	AM: Ready, Set, Spl FULL (T) PM: The King's Mes FULL (P)
6	AM: Revolting Rhymes & Disgusting Doings (L) PM: The Art of Found Poems – A Literary Collage (L)	AM: From Panther to Purr & Wolf to Woof (S) (A) PM: Disaster Strikes Hogwarts! (S)
7	AM: Beware The Jabberwocky (L) PM: Recruiting Now! Villains and Superheroes (L)	AM: Revolting Rhymes & Disgusting Doings (L) PM: The Art of Found Poems – A Literary Collage (L)
8	AM: Bend Me, Shape Me, Stretch and Snap! (S) PM: Save Us, Dark Knight! (T)	AM: Beware the Jabberwocky (L) PM: Recruiting Now! Villains and Superheroes (L)
9	AM: Disaster Stril FULL s! (S) PM: Wanted! Rol FULL :rs (T)	AM: Bend Me, Shape Me, Stretch and Snap! (S) PM: Save Us, Dark Knight! (T)

(A) Arts: Creative or Performing (L) Language (S) Science (T) Technology (M) Maths (P) Problem Solving

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

The fee is \$108 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 www.gateways.edu.au 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 NOW!

Year 3 and 4 Festival Workshops

SHERIFF TRIGGER NOMETRY AND SHOWDOWN AT THE PROBLEM PONDEROSA

WITH ALLEN DICKSON

It's the Wild West and the ever-clever Sheriff 'Trigger' Nometry has been called out to the 'Problem Ponderosa'. It seems someone fired at Mayor Prime, wounding a little more than just his ego. Armed only with your keen wit and Pythagoras' Theorem, you'll have to logically decipher the clues, figure out where the mysterious bullet came from and which rogue fired the shot. Then – as Trigger's Deputy of Deduction – you'll have to track down this 'numerical varmint' to his hideaway... but be careful of the Maths booby traps around every curve... even around every parabola.

MIRROR, MIRROR, ON THE WALL

WITH TIM BYRNE

For many centuries, mirrors have been a source of fascination. Long ago, only the very wealthy could afford to see themselves in a mirror. In this workshop, we take a good look into mirrors to discover they are anything but every day. How does a mirror work and how do you make a mirror? Can we see ourselves as others see us? We will use mirrors to test for symmetry and explore concave and convex mirrors. We'll make a kaleidoscope and learn how to make an anamorphic image with a curved mirror. Learn how mirrors are changing our world and discover the many interesting things that a mirror can do for us.

Bring a very shiny soup spoon.

READY, SET, SPHERO!

WITH ANDREW DOBBYN

If you like designing, building and programming, then this session is for you! Join us as we use Spheros to power a chariot that can race around a track. Before the race begins, you'll need to design, test and redesign your chariot until you're sure that it will bring home the prize! Then, once the building and testing phases are complete, you will use an iPad and the SPRK Lightning app to navigate your chariot to win the race. You only get one chance for glory... will your chariot have what it takes?!

LET THE FORCE BE WITH YOU

WITH ALISON BRENNAN

Greetings, young padawan, and welcome to the Jedi Training Academy! Are you ready to learn the skills required to use The Force for good instead of evil? To start, we'll learn about the seemingly mystical forces at play right here on planet Earth. Then we'll make objects fly, create sparks and sounds from thin air, develop an antigravity pencil, freeze objects on contact, investigate rocket propulsion and suspend strange intergalactic creatures in liquid. You'll learn about gravity, magnetism, motion, adhesion, cohesion and electricity. Do or do not – there is no try: you'll need to apply your mind and hands equally to avoid succumbing to the Dark Side...!

DISASTER IN THE LAB!

WITH ANNETTE SUBHANI

Fire engines have raced to the G.A.T.E.WAYS Laboratory as there has been a serious explosion that has destroyed all the research into serious diseases, and possibly secrets to your very existence. Luckily notes for 12 recent experiments have been saved. Obviously, the arsonists are intent on destroying this vital research. Unfortunately, for them they have left a clue to their identity. Your challenge, if you choose to enrol, is to use your investigation skills to collect the 12 clues by completing a series of general knowledge, maths, coded and mapping challenges hidden in the research notes, and catch the criminals before disaster hits again.

UP TO THE HIGHEST HEIGHTS

WITH JO BAKER

A breezy afternoon, a near-empty park, a kite soaring high in the sky as excited children tug at the string to make it duck and weave through the air... it's like a scene from a movie! In this 'high flying' workshop, we're going to explore the science behind how and why a kite flies and how kites are used in different cultures and countries. Then we'll make and decorate our own Sled Kite with bold designs designed to catch the eye, even when your kite soars to the highest heights, before sending it up for a 'test fly'! How high will yours fly?

PRINCE OR IMPOSTER? A ROYAL GENETIC MYSTERY

WITH BOBBIE O'BRIEN

A young prince, destined to be king, mysteriously disappears before taking the throne. Generations later, a young man claiming to be his descendant enters the kingdom, demanding to be crowned as the rightful king. The royal family is in a quandary... Is the young man merely a pretender, or is he a prince to the throne? Luckily, the DNA Detectives are here to help! Learn all about DNA and how it makes every one of us unique. Then join the DNA Detective Squad as we study DNA samples from the young man and the royal family. Can YOU help to solve the mystery of the "Prince or Pretender"? ***Please bring writing and colouring materials, a notebook and plenty of in-GENE-uity to this workshop!***

MAGIC MATHS

WITH LEANNDIA READ

Welcome to the marvelous world of magic maths, where numbers do the strangest things right before your very eyes! For my first trick, I need you to choose a 3-digit number – but don't tell me what it is! I can work it out, just by following a 'magic' process. Would you like to know the secret? Shhh... I'll show you, but only if you promise not to reveal it to others! Complex multiplication, calculating percentages and finding factors in an instant, anyone? Together we'll search the globe for some of the techniques people use around the world to make those tricky operations easier. You'll even use algebra to design your own mathe-magic tricks to WOW your friends. It's not all sleight of hand, though – these tricks will prove to be useful as well. Flex your fingers and your mind, and join us on a magical mathematical adventure!

FROM PANTHER TO PURR & WOLF TO WOOF

WITH ANDREW PLANT

Isn't it strange that our most trusted animal friends – our pet cats and dogs – are in fact highly efficient predators, descended from some of earth's most intelligent killers! Investigate the worlds of felines and canines, the planet's most beautiful hunters, discover their ancient ancestors and the huge variety that still exist in the wild today. If you swoon for servals or delight in dholes, or simply like snuggling on the couch with Tiddles or Rover, join us as we learn about and create portraits of the world's cats and dogs. **Students will be required to bring lead and coloured pencils, erasers and any other writing and drawing materials they might like to use, and sketch pads and/or note-books. Note: NO clip-together pens please – they are very distracting!**

THE KING'S MESSENGER

WITH PETE WOLSTENHOLME

You are the King's most trusted mathematical messenger and he needs a secret message sent to the other side of the chessboard... but each square is a potential pitfall of problems and dead ends. Like the fox and the hounds, can you navigate your way through diabolical defenses to deliver the royal dispatch? Utilising game theory, pattern recognition and logical deduction, you'll have to navigate your way around an array of chessboard challenges, designed to have you refine your problem-solving strategies and hone your tactical efficiency. No chess knowledge needed!

REVOLTING RHYMES & DISGUSTING DOINGS

WITH MEGAN DREDGE

You've heard of Goldilocks and the Three Bears, right? And everyone knows the story of Jack and the Beanstalk... but do you know the *real* story behind these classic fairy tales? Many years ago, Roald Dahl took these traditional fairy stories and gave them a wicked, humorous twist in *Revoltin' Rhymes*. In the words of Cinderella: "I guess you think you know this story. You don't. The real one's much more gory." Throughout this high-energy, fast-paced drama workshop, you'll enjoy exploring Dahl's mischievous recreations of traditional stories. We'll step into the shoes of his quirky characters and learn to use their voices and body language to really express their feelings, and bring to life the ups-and-downs of this fairytale world. Bring your imagination, your clever words, and your dramatic self, and let's have some fun exploring the wonderful (and sometimes crazy) world of *Revoltin' Rhymes*!

THE ART OF FOUND POEMS – A LITERARY COLLAGE

WITH REBECCA FRASER

Are you a true liter-art-I, ready to follow in the footsteps of famous poets (who sometimes don't even realise they've created poetry before their words become famous)? When you take random words and phrases from interesting places – graffiti, menus, magazines, newspapers, street signs, song lyrics – and rearrange them in interesting ways, you've got the foundation for your very own 'found poem' masterpiece. Get creative and rearrange these broken words to make them whole again by combining some of the most important elements of poetry with your own vibrant ideas and wild, wordy imagination. You'll have a complete, unique 'found' poem to take home and share - your very own literary remix! **Please bring a pair of scissors and glue (not sticky tape).**

BEWARE THE JABBERWOCKY

WITH CAM SEMMENS

Have you read Lewis Carroll's brilliant poem 'Jabberwocky'? It's a great story written in verse, but the other mimsy thing about it is that Carroll made up half the words in the poem, yet somehow you can still understand it! How does that work? How do writers like Carroll create galumphy new words that people can understand – and then take them away to use in their own speech and writing? Sometimes they mix and match Greek and Latin word roots, which we'll look at in this workshop, but we'll also go one further and investigate how to use portmanteau neologisms effectively as well. On top of all that, we'll be putting your frubjous new words into your very own beamish story poems that people can enjoy!

RECRUITING NOW! VILLAINS AND SUPERHEROES

WITH CARLEY TONOLI

Ever dreamed of wearing your undies on the outside, donning a cool cape, and living life as a superhero? Or maybe you aspire to be a supervillain, with a team of evil henchmen, and a hidden secret lair? You're in luck! Captain Marvel is scouting for a sidekick, but the evil Kree are hiring too! During this workshop we will use Plato's famous Ring of Gyges philosophical thought experiment to explore the ethical concepts of 'right' and 'wrong', 'good' and 'bad'. Together, we will do some philosophy to try and answer some of life's biggest questions. Are good and bad really a thing? If so, do we have a moral obligation to do 'good' or 'right'? Is it ever ok to do the 'wrong' thing? Are the best consequences the most important thing? Then prepare to get creative and plan your own superhero or supervillain in a top secret application dossier, complete with a detailed description of what makes your alter ego the perfect candidate for their chosen role. Will you make the cut to become the next Avenger or the Kree's newest recruit?

BEND ME, SHAPE ME, STRETCH AND SNAP!

WITH MAUREEN FRITH

The race is on to establish the first colony on Mars. The Australian team is almost ready to go! "But what we desperately need," says Professor York, "Is a new product - an elastic substance. It must be strong and versatile. It must be durable and able to withstand the cold conditions and cosmic radiation on Mars. It needs to obey Newton's Third Law of Motion and Hooke's Law BUT have NO elastic limit." In this workshop you will help Professor York investigate known elastic substances, finding out why some have more elasticity than others, why some lose their elasticity and what they have to do with Hooke's Law and Newton's Third Law of Motion. Will you and Professor York be able to invent such a new elastic substance in time for the shuttle's launch?

SAVE US, DARK KNIGHT!

WITH CARLA MAXWELL

One of the most distinctive sights over troubled Gotham City is the bright light of the Bat Signal - a luminous call by law enforcement for help from the Dark Knight. In this workshop, we will use our Arduino kits to build a light circuit, then program and project our own Bat Signal using Snap!, a coding program that allows you to build your own blocks and advanced programming functions. Will your request for aid be seen and Batman arrive to save the day in time? Or will the evil-doers of Gotham overrun the city once and for all?

DISASTER STRIKES HOGWARTS

WITH STEPHANIE AXON

It's an unqualified disaster! Professor Snape has been in a particularly bad mood in Potions class today, so everyone utters a sigh of relief when Dumbledore calls him away on urgent business. But relief quickly turns to horror as the mischievous Scabbers, startled by the slamming door, escapes from Ron's pocket. He scampers towards the front of the classroom which is lined with rows and rows of vials containing potion ingredients. Neville, in his haste to avert disaster, pulls out his wand, and instantly casts a spell aiming to net the pesky rodent. Argghhh, disaster strikes! His aim goes haywire and the net catches the wall of glass vials causing them to crash to the stone floor in a jumbled mess! Your only hope is to separate out the ingredients and return them to their correct vials. There's no time to waste! All you have are Hermione's impeccably detailed notes about the properties of each of the vial's contents and some information about mixtures and separation techniques. Can you do it before Snape returns... or will the whole class spend a month in detention sorting Flobberworms without protective gloves?

WANTED! ROBOTIC EXPLORERS

WITH KEVIN TAYLOR

Are you a robotics expert with a sense of adventure? Modern day treasure hunters have alleged that hundreds of millions of dollars' worth of pirate treasure have been secreted in the terrifying Scary Valleys, deep in the heart of the Atacama Desert. The valleys are full of eerie noises, mysterious flashing lights, weird sights and even creepy skeletons... You'll have to gather all your courage and ingenuity as you join a team of explorers and their mini excavation robots to go treasure hunting! Equipped with a set of Cubelets (magnetic robotic blocks which can be joined in a variety of ways to use their sensors, processing and action capabilities to perform complex tasks) and an ancient map, you'll have work together to avoid the many dangers lurking in the landscape and retrieve the valuables to secure fortune and fame for you and your team. Good luck on your quest!

ICE AGE 5

WITH JO DAVIS

Did you know we currently live in the 5th Ice Age? In this program, young scientists will learn about how Ice Ages are formed by performing simulatory experiments in the lab to test the carbon cycle, and why low levels of carbon dioxide contribute to lower temperatures on Earth. We will also study photosynthesis under different environmental conditions, and how this might affect global warming. Finally, we will learn how carbon gets trapped in fossils, and even make dinosaur breath! So put on your thermals, your puffer jacket and beanie: we're travelling back to the Ice Age - "cool science" at its best!

Our Festival presenters are a brilliant bunch! To learn more about them, head to

www.gateways.edu.au/programs/festivals/end-of-year-festivals

GATEWAYS

25 years of
inspiration
and challenge

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