

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 14 DECEMBER and FRIDAY 15 DECEMBER, 2017**

PROGRAM	THURSDAY 14 DECEMBER	FRIDAY 15 DECEMBER
1	AM: Ready, Set, Sphero! (T) PM: Charlie and The Great Candy Globe (S)	AM: Sounds Great! (T) PM: Fantastic Beasts (S)
2	AM: Minecraft in Action (T) PM: Wild and Windy (S)	AM: Minecraft in Action (T) PM: Wild and Windy (S)
3	AM: Who has the Golden Touch? (S) PM: Spin Out! (S)	AM: Who has the Golden Touch? (S) PM: Spin Out! (S)
4	AM: Algebra-Cadabra! (M) PM: Volcanoes - Friend or Foe? (S)	AM: Algebra-Cadabra! (M) PM: Volcanoes - Friend or Foe? (S)
5	AM: Build Your Own Amusement Park (M) PM: The Wimpy Kid Detective Agency (S)	AM: Build Your Own Amusement Park (M) PM: The Wimpy Kid Detective Agency (S)
6	AM: Where in the World is the Pink Diamond? (M) PM: Move over Minecraft – Welcome to Wordcraft! (L)	AM: Where in the World is the Pink Diamond? (M) PM: Move over Minecraft – Welcome to Wordcraft! (L)
7	AM: Impro Games (A) PM: Fluky Fiction and Random Revelations (L)	AM: Impro Games (A) PM: Fluky Fiction and Random Revelations (L)
8	AM: Let's Go Fly a Kite (A) PM: A Tangle of Tentacles (S)	AM: Let's Go Fly a Kite (A) PM: A Tangle of Tentacles (S)
9	AM: Disgusting Special Effects and Gruesome Tricks (A) PM: The Mystery of the Man (L)	AM: Disgusting Special Effects and Gruesome Tricks (A) PM: The Mystery of the Man (L)
10	AM: Telling Stories with Shadow Puppets (A) PM: Fictionary Dictionary (L)	AM: Telling Stories with Shadow Puppets (A) PM: Fictionary Dictionary (L)
11	AM: Animation Creation (A) PM: Show Me the Funny (L)	

(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 \$100 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](http://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.

**Enrolments open Monday, October 23**

## Year 3 and 4 Festival Workshops

### 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?!

### Charlie and The Great Candy Globe

with Jesse Chambers

♪ Come with me, and you'll see; a world of science exploration♪ Wouldn't it be nice if the world was made of chocolate? Where trees were covered in colourful Skittles and clouds contained fairy floss. For Charlie, this is his reality. Something strange is happening though, the trees are... melting! Hurry, Charlie is in trouble and he needs your help! Can you stop his world from melting into a puddle with some sweet science? Charlie has an idea that involves diverting the chocolate river to a higher altitude in order to re-freeze it. There's just one problem, he doesn't know how to do it! Join us as we devise a plan to save the Candy Globe, using chemistry, physics and a piece of simple technology made famous by Archimedes. If you have a sweet tooth for science, this workshop is for you!

### Minecraft in Action

with Kevin Taylor

The organisers of the 2018 Hong Kong Toy Fair have announced their theme, 'Minecraft In Action', and have put a call out to prospective exhibitors. Can you work as part of a team to design and create a model Minecraft village home, school or playground? In this workshop, you and your fellow participants will bring your virtual world to life using Robotix Modular construction equipment and motors to construct some robots. These will build and arrange the equipment and furniture in your Minecraft world. But wait... there's more! You will also need to think about the height, weight and size of your model and the structure of the robots that you will design to construct the buildings in the real world! Join us as we attempt to meet the challenge of the Toy Fair organisers and develop the best exhibit in the fair!

### Wild and Windy

with Tim Byrne

Whoosh! Sometimes we underestimate the power of the wind. We forget that air has mass and the power to move things. The wind is rarely seen but always felt. In sport, avoiding the negative effects of the wind or minimising air resistance is an important area of research. Why does a golf ball go further with dimples, yet a jet flies faster if its surface is smooth? Where are the windiest places on earth? What about wind on other planets? In this workshop you'll explore where the wind comes from and how you can have fun learning how to use it. We'll make a wind gauge, a windmill, a wind sock, a wind wheel, a flying bird and some wind music. **Please bring a clean 1.25 litre PET bottle with lid.**

### Who has the Golden Touch?

with Jacob Pini

King Midas, well known for his ability to turn everything he touches into gold, is unwell and needs time to rest. He is concerned that while he is resting and recuperating, the Kingdom's stores of gold will be depleted - so King Midas has decided to employ someone to create the precious metal while he is resting. There are two applicants for the job and King Midas needs your help to decide who is a worthy candidate. Rumpelstiltskin has applied - he says he can turn straw into gold. Harry Potter has applied - he says that by using the philosopher's stone he can turn lead into gold. Join us as we use our scientific skills and know-how to determine who should be employed by King Midas, Rumpelstiltskin, or Harry Potter. Can you help to choose the best person for the job?

### Spin Out!

with Emma Carter

Spinning things can be fun - just think of all the toys that spin, and the fun you can have by simply twirling yourself around! Join us as we explore the science behind spinning things. We'll even discover why you get dizzy and fall over when you spin. The spin of a gyroscope is used to determine the direction of unmanned aeroplanes, spacecraft and even tunneling machines! Weather systems and storms change direction and spin faster because of the spin of the earth! In this workshop we will make and experiment with some spinning tops, discover what makes a good spinning toy and determine how and why they can spin for varying periods of time. We'll also find out about how spinning helps flying toys to stay up and how spinning can be used to separate your blood for medical tests. Spinning can be both useful and fun!

### **Algebra-Cadabra!**

**with Anne Eastaugh**

Combine the worlds of magic and mathematics in this workshop of clandestine curiosities. Join us as we learn magic tricks that will enlighten and entertain the whole family, and use algebra to explore the mysteries of these tricks. Using geometry, we will also perform magic paper tricks that produce some pretty fancy results! We will explore magic numbers, disappearing numbers, infinity, paradoxes, and illusions as we perform our magic to the cry of “algebra-cadabra!”.

### **Volcanoes - Friend or Foe?**

**with Herwig Waldhuber**

Did you know that there are over 100 volcanoes in Australia? What do they all have in common and how do you recognise them? In 2016 three volcanoes, Mt Sinabung, Mt Rinjani and Mt Gamalama erupted in Indonesia all within three days. This forced airlines to ground many flights in and out of that region. Was it a coincidence that they all erupted virtually together? Join us as we learn all about volcanoes - how they function, the unlikely places they've been discovered, the tallest, the smallest, the oldest, the youngest and the even the most beautiful volcanoes. We'll explore the role that volcanoes played in developing the Earth's climate and whether Earth is the only planet in the solar system that has volcanoes. By the time we're finished you'll be erupting with knowledge about these fascinating land forms!

### **Build Your Own Amusement Park**

**with Jenny Lee**

Calling all amusement park enthusiasts! A mysterious billionaire is running a world-wide competition to design a brand new amusement park and if you win (drum roll)..., you will have the honour of having the park named after you! Imagine having your own park, wouldn't that be awesome?! There's just one small condition, the billionaire wants you to use only simple 2D and 3D shapes to design the park. There are no other rules and you can build it any way you like! You can fill the park with roller coasters, Ferris wheels, merry-go-rounds or haunted houses. And don't forget to add trees, food stalls, and anything else your amusement park-loving heart desires! Let your imagination run wild and let's start planning!

### **The Wimpy Kid Detective Agency**

**with Allen Dickson**

Greg Heffley looks like he's going to be in trouble...again! It's not enough that he lives with the ever-present threat of the cheese touch, but now he is confronted by a mystery that he'll have to solve or else he'll be the one who is blamed. A suspicious white powder has appeared in Mr Litch's coffee cup along with a coded note... and Greg looks like the prime suspect unless he can figure out who has set him up. He has to do more than write this up in his diary... I mean, his journal. He has to create the Wimpy Kid Detective Agency. Armed with a list of suspects and some awesome experiments, you will perform forensic investigations in chemical analysis, crack a mysterious code and see what is hidden in plain sight in order to help Greg discover whodunit and how. Can you help him solve the crimes before school holidays start?

### **Where in the World is the Pink Diamond?**

**with Sharon Leibowitz**

Do you like detective work and solving mysteries? Then you're the perfect person for the job! The world's biggest pink diamond has gone missing and we need to find it... pronto!! The clues will have you travelling right across the globe and crossing numerous time zones because they're hidden in different corners of the world! Using your mathematical and geographical knowledge, as well as your ability to work in a team, you will fly to different countries as you solve smaller cases along the way, revealing even more clues. Put all of the clues together, crack the code, and your reward will be the location of the pink diamond! Are you up to the challenge?

### **Move over Minecraft – Welcome to Wordcraft!**

**with Andrea Blake**

Have you got what it takes to be a Master Wordwrangler? In Wordcraft, to make it to the POP (Pen of Perfection) a champion must overcome many challenges, armed only with a brain and a pencil! If you choose to accept the quest you'll need to beat a Befuddled Confabulation and Descrambulate a Spooner-fied story, not to mention Leap across Lipograms and Punch out a Pangram. Do you dare to Doublet or chew up a Chainchunk? Great! Will your vast vocabulary be vanquished? No way! Will you perfect your powers and triumph over tricky tests? There's only one way to measure how clever your skills with a word really are – sign up for this wicked workshop! ***Bring an exercise book (and an exercising brain), a sharp pencil (and a sharper mind), a favourite pen (with special powers if possible)!***

### **Impro Games**

**with Sarah Kinsella**

Join us in this interactive workshop, as we explore the building blocks of improvised games and theatre. We will share stories, play lots of drama games, laugh and have loads of fun. Improvisation improves social skills, enhances confidence and communication, and encourages you to take risks. It will teach you how to work together with others in a positive, fun and nurturing environment. There are sure to be some memorable moments and hilarious experiences you'll be dying to share with your friends and family!

### **Fluky Fiction and Random Revelations**

**with Rachel Holkner**

What are the chances you could write a really good story using the tools of mathematics? Pretty good actually! In this workshop, instead of making careful, logical decisions for our characters and plots we'll be rolling dice, measuring distances and angles and sorting by shape, size, colour and whatever else takes our fancy. By introducing the element of aleatoricism (chance) into creative work we make connections and discoveries that we'd never have seen otherwise. ***Please bring an A4 writing book.***

### **Let's Go Fly a Kite**

**with Joanne Baker**

During the workshop we will construct and decorate a Sled Kite. You'll need to harness all of your creativity to create a kite which is as individual as you. Then we'll experience the thrill of flying our kites. Jo will bring along some of her own kites to give you some idea of the different shapes and sizes of kites and show you the principles of how to fly a kite. She also hopes to cover some of the history of kites and give you some ideas about designing and building kites at home. ***Please bring some colourful textas.***

### **A Tangle of Tentacles**

**with Andrew Plant**

Do you know your squid from an octopus? Is a bunch of octopuses an octopod? And is it octopuses at all, or octopi, or octopodes? If a giant squid is colossal, how big is a colossal squid? Or a kraken? With so many questions, it's no wonder we're in a tangle when it comes to tentacles. From tiny to titanic, cute to creepy, cephalopods are one of nature's most extraordinary groups of animals. Join zoologist and artist Andrew Plant for a swim with the cephalopods, from the Flamboyant Cuttlefish to Vampire Squid and the Dumbo Octopus. Learn all about how alien these animals are compared to us, and discover what is fact, and what is myth. Such amazing looking creatures deserve to be illustrated, and we'll be doing just that! ***Please bring a sketch pad and drawing pencils.***

### **Disgusting Special Effects and Gruesome Tricks**

**with Debi Cohen**

Ever wondered how special effects are created for the movies? Makeup can turn ordinary humans into zombies, monsters, and even vampires. Now you can learn to create some of these special effects yourself! We'll practise the tricks that makeup artists use to create their most disgusting and frightening effects. You'll make fake blood, oozing blisters, scabby cuts, burns, and more. Along the way, you'll also learn some cool science about what happens to your body when things like gashes, bruises, and burns are for real. ***Please bring a small bottle of PVA glue and a crepe bandage. Wear old clothes. Not recommended for students with food or skin allergies.***

### **The Mystery of the Man**

**with Annette Subhani**

There was movement at the station... this is the first line of one of our most popular Bush Ballads. What happens at the station and why was there movement? Australian Bush Ballads have a long history; they tell stories of larger than life characters. In this workshop you will discover the mystery behind the Man from Snowy River and explore the world of famous writers like Banjo Paterson and Henry Lawson. Our task will be to discover some real-life heroes from well-known ballads before we trial some memorisation techniques and become expert story-tellers. Then, with sharpened pencils, we will put words on paper as we try to capture the spirit of the times in our very own ballad.

### **Telling Stories with Shadow Puppets**

**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, along with the characters of your classmates, behind a backlit screen, creating and telling your own stories to wow your classmates!



### **Fictionary Dictionary**

**with Jane Godwin**

Did you know that every year, new words and phrases (neologisms) are added to the dictionary? Some words added this year are: fake news, bubble soccer, plyscrapper, shoefiti and standing desk. Why don't we help the lexicographers and create some new words of our own? Like *nervited* – when you've been invited to a party but you feel very nervous... or *souperstition* – when you have a terrible feeling about what might be in the soup... or *origamiharmi* – when you give yourself a paper cut making origami... or *bananadrama* – when a banana has squished in your school bag... or *balloonatic* – someone who's crazy about balloons! If you like playing with language and making up new words, then this is the workshop for you! We'll look at the history of the English language (where did the alphabet come from??), discover hidden and silent languages, the secrets of grammar, dying words and newborn words – and along the way we'll create our own words for a fictionary dictionary!

### **Animation Creation**

**with Ruth Evans**

Are you a fan of the Lego Movie? Wallace and Gromit? Boss Baby? Minions? Stop Motion animation is one of the hottest areas of film-making today. Learn how to make objects come to life as you create a short movie using the Stop Motion app on the iPad. We'll start by watching a couple of cool animation videos for inspiration. Then we'll work with a partner to create a storyboard, use LEGO to build scenery and props and then shoot our very own movie. Learn about adding sound effects and find out how to avoid the most common pitfalls in animation. Get ready to have a great time – animation rocks! ***Please bring an iPad with the Stop Motion Studio app loaded, plenty of memory space and a full battery. You might like to experiment with the app before the session. Also bring an iPad cover with a stand if you have one.***

### **Show Me the Funny**

**with Louise Flourentzou**

Do you know what it takes to make people laugh? Join Hillary Rious and her team of budding comedians at The Laughter Factory on a side-splitting writing adventure. Learn about the tools of the trade such as wordplay, exaggeration and surprise so that you can have your readers in stitches. After trying your hand at joke writing, you will work in teams to write your own comedy sketch which you will perform at the end of the session. Is your funny bone tickled? Come on, let's have some pun, I mean...fun!

### **Sounds Great!**

**with Mark Maxwell**

Since the 18th-century, musicians and composers have adapted a number of musical instruments to exploit the novelty of electricity and circuitry. The first electric synthesizer, called The Musical Telegraph, was invented in 1876 by Elisha Gray. Fast forward to the present and countless electrified sound machines have been invented since then. Most recently, the invention of the MaKey MaKey™ kit turns everyday objects into touchpads. Combine this with the game-making program called Scratch, add the music software Garage Band and a laptop, and you've got yourself a recipe for a new type of invention. In this workshop you will play with and create your own technological sound machine. ***Please bring a recording device, for example an iPod or camera, if you want to document any of your achievements.***

### **Fantastic Beasts**

**with Joanne Davis**

Calling all magizooologists! Have you ever wondered if fantastic creatures such as the mischievous Niffler or the adorable Demiguise could really exist? In fact, did you know that the platypus was thought to be a 'fake' animal when specimens were first sent back to England? Come on a journey across the globe and across time with our intrepid explorers to discover other 'real' fantastic beasts. We will learn about divergent and convergent evolution, and how genetic mutations create new and exciting creatures. No journey searching for unique creatures would be complete without meeting Charles Darwin and learning how he developed the Theory of Evolution in the Galapagos Islands! We will learn about DNA, genetic engineering, and inheritance, and then apply this knowledge to develop a fantastic beast of our own! Let's hope that our menagerie of mysterious creatures fits back into our magic suitcase!

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

**[www.gateways.edu.au/programs/festivals/end-of-year-festivals](http://www.gateways.edu.au/programs/festivals/end-of-year-festivals)**