

# GATEWAYS FESTIVALS

G.A.T.E.WAYS has pleasure in inviting gifted and talented  
**Year 3 and 4 children to a 'FESTIVAL OF WORKSHOPS'**  
 at Canberra Grammar School, Alexander Street, Red Hill

**MONDAY 1 JULY AND TUESDAY 2 JULY, 2019**

PROG	Monday 1 July 2019	PROG	Tuesday 2 July, 2019
1	AM: Fluid Power! \$2 levy (T) PM: Robbery at the Museum (S)	1	AM: Fluid Power! \$2 levy (T) PM: Robbery at the Museum (S)
2	AM: The 13 Storey Treehouse in the Spotlight (T) PM: Mesmereyes! (S)	2	AM: The 13 Storey Treehouse in the Spotlight (T) PM: Mesmereyes! (S)
3	AM: Who Ya Gonna Code? (T) PM: The Light Magician's Apprentice (S)	3	AM: Disaster Strikes Hogwarts! (S) PM: Inspector Clouseau's Cluedo Mystery (S)
4	AM: Sheriff Trig-onometry... (M) PM: Inspector Clouseau's Cluedo Mystery (S)	4	AM: Sheriff Trig-onometry... (M) PM: The Case of the Missing Tapestry (S)
5	AM: Into Another Dimension (A) PM: Don't Trip Over Your Tropes! (L)	7	AM: Into Another Dimension (A) PM: Don't Trip Over Your Tropes! (L)

(A) Arts: Creative or Performing (T) Technology (S) Science (M) Maths (L) Language and Literature (P) Problem-solving

Please choose one program only. Workshops cannot be mixed and matched. Do not choose the same workshops both days.

The fee is \$110 per day.

Enrolments open Monday, 13 May

- Go to 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'.
- 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.
- Complete fields then click 'Continue to Program Selection'.
- Check the box under 'Select' for the festival required, then 'Continue to Unit Selection'.
- Select 'Enrol' for the days required. Only programs with availability can be selected.
- Select a program and then 'Continue to Home Address'. Complete all fields and proceed to payment page.
- If you require assistance please phone G.A.T.E.WAYS on 03 9894 2116

## FESTIVAL WORKSHOPS

9.15am – 3.00pm (registration from 8.30)

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.

Also bring along any additional materials listed for your program.

### **FLUID POWER! with Tim Byrne**

Could you lift a car? No? Our bodies aren't built to lift such heavy objects, but can we use basic scientific principles to create machines that can do it for us. By pushing a button on a hydraulic lift, a mechanic can easily raise a car with one finger. Few people would realise that a water pistol and a giant crane work in a similar way through the compression of a liquid. The beauty of hydraulics is in the way a small force can be transferred over distance and be multiplied to make the liquid move faster or in a more powerful way. In this workshop we will examine the way hydraulics are used in diggers, brakes and railway boom gates. We will learn some science and explore the relationship between force, area and pressure. You'll construct a working model of a railway boom gate which will re-enforce Pascal's principle about constant pressure in compressed liquids. ***This workshop has a \$2 levy for materials. Bring a 30 cm wooden ruler. Also bring a matchbox car/ truck/ train (Optional).***

### **ROBBERY AT THE MUSEUM with Bobbie O'Brien**

An extremely rare and valuable specimen has been stolen from the museum overnight! The director of the museum, Mr Artie Facts, is distraught... Can you help him find the culprit? Luckily, the DNA Detective Squad is on the case! Learn all about DNA and how it can be used to solve crimes in this thrilling workshop and help Mr Artie Facts figure out WHODUNIT?! ***Bring plenty of in-GENE-uity!***

### **THE 13 STOREY TREEHOUSE IN THE SPOTLIGHT with Kevin Taylor**

Are you creative? Do you like solving challenges? If your answer is yes, then the ABC publicity department needs you to become a member of the team which is going to design, create and engineer Andy Griffiths' 13<sup>th</sup> Storey Tree House for a promotional display during book week. You will need to work creatively whilst also employing your mechanical and electrical engineering skills. What will your treehouse look like? What services will it need? How do you enter? How will you get from one floor to the next? Where will you store your treasures and skate board? How are you going to stop the monkeys and cockatoos from raiding the tree house fruit? Your solution to all of these challenges will involve you using the Robotix construction system. ***Bring a device to take photographs of your creation if you wish.***

### **MESMEREYES! with Angela Fattore**

Did you know that more than 80% of the information our brain receives comes through the eyes? I know! Eye can't believe it either! Our eyes help us to perceive shapes, movement, distance, colour, shade and depth by detecting visual images that are upside down, backward and two dimensional. So how does this rather small but very complex sense organ make sight possible? Well, it doesn't do it on its own. Let's have some fun as we investigate the intricacies of the crucial relationship between our eyes and our brain. In this workshop we will investigate the *eyeronic* perceptions our eyes and brains experience especially optical illusions! We'll undertake activities involving light, mirrors, reverse writing, colours and more. What a bright *eyedeas*?

### **WHO YA GONNA CODE? with Carla Maxwell**

Quirkytown has been invaded by a 'scary' creature— a giant ghost made of marshmallows called Stay Puft Marshmallow Man. People are in an absolute tizzy! We are now wanting new recruits for our ghost buster team (Official Protectorate of the Earthly Realm) so that the beast can be tamed. Become a ghostbuster as you create a game in Scratch to catch SPMM and other sneaky spirits! You'll have to consider how to set up your game so that the stylistic elements and effects are programmed to be appropriately spooky. You'll need to code the ghost to move predictably at first, then making it harder to catch by randomising its movements. Lastly, you'll have a chance to check out and give feedback on others' games and to receive feedback on yours so that you can improve its design and functionality. ***Bring a blank USB stick.***

### **THE LIGHT MAGICIAN'S APPRENTICE with Alison Brennan**

Luminous Lily, is an amazing magician. She is famous for her fantastical, magic tricks with light. Her audiences are constantly wowed, and they are always trying to work out just how that magic happens. However, it's a well-kept secret that most of what she does is pure science, (with only a little bit of magic thrown in). She travels far and wide and is due to perform a sell-out show at Canberra's Llewellyn Hall for Magic Week. However, disaster has struck. LL has started suffering blinding headaches that result in spots before her eyes, double vision, and photophobia!! She is relying on you, her new apprentice to save the day. This hands-on workshop full of fun and experimentation focuses on light, reflection, refraction, lenses, mirrors and colours. By quickly learning everything Luminous Lily knows you'll be able to save the day up on stage. After all, the show must go on!!

### **SHERIFF TRIG-ONOMETRY AND THE WILD WEST MATHS MYSTERY 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 Math booby traps around every curve... even around every parabola. ***Please bring a calculator.***

### **INSPECTOR CLOUSEAU'S CLUEDO MYSTERY with Ruth Evans**

Bumbling Inspector Clouseau has been trying to work out who killed Professor Plum, but he can't seem to solve the case. Can you help? First, head to spy school to learn the latest crime-solving techniques. Next, work your way around the room analysing clues. Interview the suspects, read witness reports and undertake forensic science tests to solve the crime. Whose footprints are those near the body? Whose fingerprints were found on the window? Compare fibres using a magnifying glass and search the scene of the crime for evidence. Learn about encryption and unravel some challenging secret codes. Do you have what it takes to solve this dastardly crime?

### **INTO ANOTHER DIMENSION with Suzie Thomas**

Something very strange is happening in the fairy tale kingdom. Glitches in the space-time continuum keep popping up and sending our beloved fairy tale characters into different moments in history and the future! Sleeping Beauty is catching forty winks in Feudal Japan while Hansel and Gretel are dropping breadcrumbs in colonial Australia. Rapunzel is tied up in the Salem Witch trials while Jack climbs his beanstalk to try and escape a post-apocalyptic world. Strap yourself in as we explore context in performance, discovering the impact that the *when*, *where* and *why* can have on the characters in a story. We'll use our analytic and interpretive skills to create realistic settings for our transplanted fairy tales, and we'll develop our expressive and performance skills to transport our audience to that world, whether historical or imagined. Without the help of elaborate sets, costumes or visual effects, we'll prove that through theatre, time travel is always possible. ***Please wear comfortable clothes that allow you to move freely.***

### **DON'T TRIP OVER YOUR TROPES with Rachel Holkner**

Do you get the feeling that you've heard this one before? Someone, who has no parents, learns from an old wise one that they have a special power. This person must use their power to defeat a terrifying villain. So, is this Luke Skywalker or Harry Potter? Wait, maybe it's Emmet, Aladdin, Sailor Moon or She-Ra!? The Chosen One trope is one of the most easily recognised story patterns. There are hundreds of other tropes however, and once you've discovered a few, you'll spot them everywhere! Some of them have silly names (Phlebotinum anyone? MacGuffin?) and some are named for their origins (We're going Down the Rabbit Hole, but first – Cliffhanger!). In this workshop we will ask if the most popular stories today are the ones which owe the most to their use of tropes. We'll identify common patterns, turn a few inside out, and create some unbelievable new stories.

### **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?

### **THE CASE OF THE MISSING TAPESTRY with Joy Garratt**

"Untitled" the huge Great Wall tapestry at Parliament House has mysteriously disappeared. This amazing tapestry was especially commissioned for Parliament House Canberra so who in the world would want this unique art work? Perhaps a scientist passionate about Halley's Comet (which appeared whilst the tapestry was being made) has taken it to add to a private collection or maybe an art collector has snatched it to sell to a secret buyer? Could it have been relocated to a famous art gallery overseas...the Louvre, the Guggenheim or even the Tate? And how could such large artwork have been smuggled out of the building? Super sleuths are needed to solve this case and locate "Untitled". Codes will need to be cracked, evidence examined using forensics and suspects statements scrutinised for clues! As well as following scientific processes, students will be offered opportunities to problem solve using critical and creative thinking skills. ***Bring a blank A4 notebook.***

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

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

**GATEWAYS** 25 years of inspiration and challenge