

G.A.T.E.WAYS has pleasure in inviting gifted and talented
Year 1 and 2 children to a 'Festival of Workshops'

hosted by Waverley College, 131 Birrell Street, Waverley

MONDAY 9th DECEMBER & TUESDAY 10th DECEMBER 2019

9.30 am to 3.15 pm (registration 8.45)

PROGRAM NO.	Monday 9 th December	Tuesday 10 th December
1	AM: Robo Eats to the Rescue \$4 levy (T) PM: Intergalactic Digital Sports Championships (T)	AM: Robo Eats to the Rescue \$4 levy (T) PM: Intergalactic Digital Sports Championships (T)
2	AM: In Your Dreams! (L A) PM: Full Steam Ahead! \$3 levy (L A)	AM: In Your Dreams! (L A) PM: Full Steam Ahead! \$3 levy (L A)
3	AM: Defeating the Slime Monster (S) PM: Too Many Zeros for Robonovo (M S)	AM: Defeating the Slime Monster (S) PM: Too Many Zeros for Robonovo (M S)
4	AM: Rainbow Magic (S) PM: Dinosaurs Down Under (S)	AM: Rainbow Magic (S) PM: Dinosaurs Down Under (S)
5	AM: The Big Bang! (S) PM: Team Taronga (M P)	AM: The Big Bang! (S) PM: Team Taronga (M P)
6	AM: Chicken Antics! (P) PM: Mystery at the Museum (P A)	AM: Chicken Antics! (P) PM: Mystery at the Museum (P A)
7	AM: Conquering the Kalahari (P S) PM: Kitchen Capers! (S)	AM: Conquering the Kalahari (P S) PM: Kitchen Capers! (S)

(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 \$109 per day.**

**Please bring an A4 sized 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 02 9940 0303

Enrolments open Monday 21st October



Year 1 and 2 Festival Workshops

ROBO EATS TO THE RESCUE

WITH JESS BUCHANAN AND JULIAN RIDDEN

The traffic is getting crazy in this city! You've been contacted urgently by Pizza Palace's home delivery service after a series of customer complaints. They want you to help them overcome the problems caused by city congestion and request that you design a fleet of autonomous robotic vehicles which will be able to deliver the pizzas before they get cold. Can you design a vehicle which will hold several pizzas safely, keep them warm and be programmed to avoid obstacles so that not a single pizza will be dropped? You'll have to research, create and program your robot to collect the pizzas from the restaurant kitchen and then move smoothly and quickly around the city to the customer's address. You never know, this could be the beginning of a Robo Eats franchise! This hands-on, fast-paced workshop involves the application of engineering, mathematical and technological skills. Participants will take home their designs at the end of the day. **There is a \$4 materials levy for the construction of the models in this workshop.**

INTERGALACTIC DIGITAL SPORTS CHAMPIONSHIPS

WITH LUCINDA CLUTTERBUCK

Get your wings on! You've been selected to represent Planet Earth in an intergalactic digital sports animation championship! You can compete in the rocket-boot race, the solo flight, the flying bag race and the slithering race. The ultimate champion of the day will be the team that can break the record for the greatest number of people able to fly thirty meters in unison. You have hired a professor of digital media to assist you in making rocket-boots, calculating the speeds and heights needed to achieve the best flights, and making an animated film to record your efforts. To win the championship, we'll need some mathematically minded individuals, some people with lots of jumping experience, and a bunch of all-round creative problem solvers. **Please bring a pair of boots to this workshop. If you have a set of costume wings, please bring them as well!**

IN YOUR DREAMS!

WITH EMMA ROSE SMITH

Where have you been in your wildest of dreams?
Was it eyes-shut slumber or a wide-awake fantasy?
What did you do there; what did you see?
Who did you meet; what did you perceive?

In this workshop we'll enter the realm of our dreams as we visit the places from our wildest imaginings. We'll consider the difference between various types of dreams and sleep states before setting off on this exciting, exploratory journey. We'll be drawing, experimenting with words, following twisting pathways, rippling rivers and noisy alleyways. Who knows where they will take us?! All this inspiration will culminate in a piece of powerful performance poetry. Tell us about your dream place... The stage is yours! **Bring a small object that could have come from your dream place, or a drawing of what your dream place could look like.**

FULL STEAM AHEAD!

WITH ZUZI FORT

Do you love fantasy, science fiction and the quest genres? Are you a gadget-type-of-kid? Can you construct something elegant out of random bits and bobs? Are you a fan of automatons, clockworks or steam-powered machines? If you're able to answer YES to any of these questions, then you may not know it, but the world of Steampunk is for you! After an introduction to the conventions of the genre, we'll meet some of its fascinating archetypes: the pirate, scientist-as-hero, the polymath (a Renaissance man or woman), the commoner, the aristocrat and the explorer. We'll explore these characters' similarities and commonalities and then create our own Steampunk persona – a 3D version, in fact! Using everyday items and exploring the workings of a camshaft mechanism, we will design the ultimate Steampunk hero and a superlative gadget too! **There is a \$3 materials levy for the construction of your creation in this workshop.**

DEFEATING THE SLIME MONSTER

WITH RENGEN PARLANE

For decades, Slime-topia has been terrorised by the goeey and gross Slime Monster. The residents never know when it is going to appear and engulf everyone in a puddle of slime. After years of living in fear, the people have decided to fight back, and they have asked *you* to help them defeat this evil monster. In order to achieve this, you must first learn some basic chemistry – you will start by learning about what molecules are, what holds them together, and what factors affect their chemical properties. You will then apply this knowledge as you reproduce the slime found inside the dreaded slime monster and, hopefully, work out how to damage or destroy it. You can expect to learn plenty about atoms, molecules, bonding and chemical interactions in this messy, action-packed workshop. The Slime-topia residents are counting on you!

TOO MANY ZEROS FOR ROBONOVO

WITH DIMITRI DOUCHIN

There are over 100, 000, 000, 000 stars in the Milky Way (our galaxy). Gulp – that’s a lot of stars! Robonovo, our favourite Martian rover, is trying to guide us back to Mars after we strayed off course during a routine orbit, but it's frying its circuits trying to keep track of all those zeroes! To help Robonovo track the right course, we will investigate the make-up of different objects in our sky, their size and their distance from us, and the really big numbers involved in explaining it all! Which is bigger, Neptune or the Andromeda Galaxy? How many moons would fit between the sun and Earth? How long would it take to go to Proxima Centauri, our closest neighbour star, if we travelled at the speed of light? We will have to solve these and other mysteries of astronomical size in order to help Robonovo find the right path back to Mars. This workshop promises to be 1, 000, 000 tonnes of interstellar fun and mathematical challenge!

RAINBOW MAGIC

WITH MARIANNE SCHMIDT

Rainbows are simply beautiful and no matter how many times you see one, you can't help but feel Mother Nature's magic! In this workshop, we will explore the science of rainbows – how they are formed, how we see them and why they are arched. We'll experiment with making our own rainbows as we work to understand all about the reflection, refraction and dispersion of water droplets. Don your science hats and join us to delve into the mesmerising phenomenon of rainbows! **Please bring an old CD or DVD, and a clear drinking glass, labelled with your name.**

DINOSAURS DOWN UNDER

WITH VANESSA RYAN-RENDALL

Congratulations! After winning a major competition you are redeeming your prize today – you have been appointed head curator of the NSW Museum for 24 hours. Your excitement subsides somewhat when you find yourself in the dinosaur section, deep down in the basement. Your job... putting together Australian dinosaur skeletons. The basement is dark, it smells musty, you have no knowledge of Australian dinosaurs and there is a strange scratching noise coming from one of the cabinets! As curiosity gets the better of you and you wander over to the cabinet, suddenly you see a swirling mass. ZIP, ZAP, ZOOM! You've landed in Gondwana Land. You know you shouldn't stay for too long as the swirling seems to be diminishing already but this is your chance to learn as much as you can. So, tie up your boots, keep your wits about you as you discover what sorts of creatures these Australian dinosaurs were, how and where they lived and what made them different from those found in other areas of the world. Perhaps you will even discover a new type of dinosaur - and give it a name of your own!

THE BIG BANG!

WITH SCOTT HAHN

What is the **BIGGEST** ^{E_xp_l°s_io_N} you can think of? What is the **HOTTEST** thing you can think of? What is the **~coldest~** thing you can think of? What is the **darkest** or **BIGGEST** or ****brightest**** or quietest or *anything*iest thing you can think of?

I would like to invite you to uncover a story. It's a story about something **BIGGER** and **HOTTER** and **~colder~** and ^{E_xp_l°_di_N-er} than anything you could even imagine. Even you are part of this mysterious story. What exactly happened at the beginning? Why do things blow apart? Why do things come together? How is it that the same thing can exist in three different states? Why does it matter? (No pun intended.) How did the Earth form? Has it finished evolving? What happens when you try to trap heat? What happens when it doesn't feel like being trapped anymore? What *is* heat, anyway?

Oh, there are so many questions! And the only way to begin to answer them is to see for ourselves. So today there will be experiments. Because what's a great science story without experiments?? Not necessarily *hotter-or-exploding-er-than-anything-you-could-imagine* experiments (I asked, but we're not allowed to detonate bombs in a public space, sorry) yet there will certainly be hot, exploding and rather quite remarkable things happening. **I would like to invite you to come take part in the story of the Universe** (so far).

TEAM TARONGA

WITH KATE PARKER

Imagine having the opportunity to design a brand-new zoo! The board of Taronga Zoo is setting up a new location for rural New South Wales and they need our help! Zooville will be twenty thousand square metres of animal wonder. First though, using our mathematical (and particularly geometry) skills we'll need to decide how many and which animals we can fit on the site and how big their enclosures will need to be. We'll have to consider what each animal needs in terms of space and habitat. Which animal can fit where and does the popularity of some animals mean they should be strategically placed? Should we put lions next to zebras or kangaroos? Will we set up herbivore and carnivore routes to make the job for our animal handlers easier? And zoos aren't JUST about the animal enclosures - you'll also oversee the placement of walkways, special exhibits, rest areas and food kiosks. Putting it altogether, we'll draw up blueprints and even make a small model of one chosen enclosure to present to our Taronga head office.

CHICKEN ANTICS!

The chickens are escaping one-by-one from the famous "Chicken Run" farm. Tweedy, the owner, is worried they'll be eaten by foxes once outside the farm's fences and he is desperate to prevent any more absconding. Tweedy is sure that one of the chickens is the ringleader and is *egging* the others on. Trouble is, the chickens are denying all knowledge of the mysterious disappearances. To make matters worse, Tweedy is not a good judge of character so he needs you to help him pinpoint the likely culprit. Is it Rocky the circus rooster, Ginger the hen, Fowler the former fighter pilot, Bunty the champion egg layer or Babs, the knitting champion? One of the flock, Daisy, has agreed to help you out. You'll need to use your detective skills as you make inferences, use hot seating, examine witnesses and investigate word of mouth reports. You'll build character profiles of the likely culprits, examine the information and identify possible motives. Will you be able to nail the culprit before all of Tweedy's chickens become dinner for the cunning fox?

WITH MICHELLE EMSLEY

MYSTERY AT THE MUSEUM

Frauline Frankenfurter has been curator of Le Grande Museum for twenty years. During that time, not one single thing has ever gone wrong. That is, of course, until now... The museum's prize possession is missing! Join Frauline Frankenfurter and her staff of experts as we go undercover on an international mission to find the thief, retrieve the missing object, and bring it back unharmed. Deploying acting skills such as movement, voice and teamwork, you'll need all your wits about you to avoid detection and to bring the guilty party to justice.

WITH EMILY TAYLOR

CONQUERING THE KALAHARI

Get ready to embark on an amazing African adventure as we plan our mission across the incredible Kalahari Desert. It's an area of over 900,000 square kilometres and you will be stepping into a very hot, harsh environment. What vehicle will you take? How much water will you need? How will you carry fuel? So many things to plan and prepare before we leave Sydney! Once we have finalised our preparations we can set off...however we are sure to come across many obstacles along the way. Watch out for that pesky malaria mosquito, extreme heat, leaking fuel tanks, contaminated water and flat tyres to name just a few of the challenges that may crop up! Can you traverse the Kalahari safely with both your team and vehicle intact?! This mission requires a creative thinking team of collaborators and problem solvers with a super keen sense of adventure! Let's conquer the Kalahari!

WITH TRACY FORBES

KITCHEN CAPERS!

Grandma Curie spent the day at your family home while your parents were out and together you have both made a right mess of your pantry cupboard! Your gran was a very successful scientist when she was younger and misses the magic of her chemistry days. So... she turned your kitchen into a lab and brought in her Chem Club Cookbook to teach you a thing or two about kitchen chemistry. You have discovered that those seemingly harmless bottles of ingredients in your pantry might not be so innocent after all! Being the inquisitive child that you are, you want to make the most of your opportunity to concoct some kitchen chemistry chaos! Grandma Curie teaches you all about the acids, bases and colloids before allowing you to whip up some food magic yourself! You test various ingredients for their chemical properties and watch in amazement at how they react with one another. Grandma Curie reminds you that knowing the science behind gastronomy lead Heston Blumenthal to design food for astronauts - who knows where your science and culinary skills could take you!?

WITH ANU VIJAYAN

Our Festival presenters are a brilliant bunch! To learn more about them, head to
www.gateways.edu.au/programs/festivals/mid-year-festivals

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