

MATHS MATTERS

NEWSLETTER OF THE AUSTRALIAN MATHEMATICS TRUST



SEPTEMBER 2018

AMC update

Thanks to all the teachers who facilitated the Australian Mathematics Competition in schools! AMC answer sheets came in quickly and have been processed. An electronic results report will soon be on its way to participating schools for name checking and certificates for all students will follow at the end of September.

We also thank the many teachers who responded to our survey following the AMC. We are always seeking to improve the experience for teachers and students and will take account of feedback.

NEW: Unpacking an AMC problem

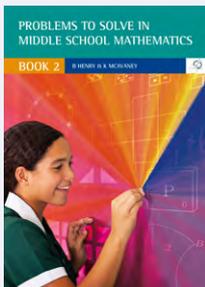
Check out our new [YouTube](#) channel to find out how to do a couple of those tricky last AMC questions.



▲ Some of our volunteers hard at work processing the AMC answer sheets.

New books from AMT to extend your students

Our next compilation of AMC questions and solutions (*Australian Mathematics Competition Book 6, 2013—2018*) is due out this year. We will trial this book in digital format. We'll let you know via our website when it's available for purchase through our shop.



Also coming soon is the latest edition of *Problems to Solve in Middle School Mathematics Book 2*. This book contains all questions from the Primary divisions of MCYA Challenge from 2004 to 2013, with extension questions. These are presented as single photocopiable worksheets for students.

New puzzle page

The University of New England is offering some [enjoyment and challenge](#) to anyone who loves maths.

Fields medal for top mathematicians in the world

One of this year's four Fields medallists is [Akshay Venkatesh](#), an Aussie who grew up in Perth. He is only the second Australian to receive this prestigious award.

As a very young mathematician, Akshay was a bronze medallist in our 1994 Australian International Mathematical Olympiad team.

Akshay's achievement today is an inspiration for all young Australian problem solvers.

Prizes for 2018 AMC incentive to schools

Thank you to everyone who entered the AMC. Here are the results from our 2018 entry promotion.

- A** AMT workshop from AMT Chief Mathematician: Shore School NSW
- B** MCYA Enrichment material for 50 students: San Sisto College QLD
- C** Free entry for the 2019 AMC for 100 students: St Agnes Catholic High School NSW



2019 Competition dates

- ✓ CAT 2 April
- ✓ AMC 1 August

Conferences

Come and sample our content at our stand at upcoming teacher conferences:

- ✓ **MAWA** (19–21 November 2018)
- ✓ **MAV** (6–7 December 2018)

AMT update: corporate rebrand

In 2018 we have engaged a specialist agency to develop a new corporate identity for AMT. The new AMT corporate identity will result in a shared understanding of who we are and what we do. An exciting new brand will reflect this. Our ultimate aim is to boost the numbers of Australian children engaging with and participating in our wonderful content and activities.

We expect to launch in December with a new logo and website. Look out for us in 2019!

Maths and Informatics students take on the world

IOI news



◀ Our Informatics team flew to Japan in September to compete at the International Olympiad in Informatics, the top programming competition for secondary school students. Jerry Mao and Angus Ritossa and IOI first-timers, Albert Smith and Jacob Smith, did their best to enjoy the environment and solve the problems on the two competition days. Read about their experience on their [blog](#).

In a wild finish to the two-day competition and under a live scoreboard, Jerry Mao, Angus Ritossa and Albert Smith all achieved high silvers, narrowly missing the gold medal cut-off. They competed against 335 students from 87 countries who attended the 30th annual IOI in Tsukuba, Japan.

IMO news



◀ The IMO team were in Romania from 3–14 July, after training with the British team in Hungary the preceding week. During that time, the Australian team won the Ashes competition for the first time since the victory in its inaugural year.

The team performed brilliantly at the IMO to win six medals: two Gold, three Silver and one Bronze. They ranked 11th in the world, ahead of the UK, Japan and Vietnam, among many countries. Three students had scores in the top 70, out of 594 participants. Congratulations to the students on their outstanding efforts.

We are grateful to their leaders, Angelo and Andrew, and to Mike Clapper and Jo Cockwill for accompanying them. Read more on the [AMT website](#).

EGMO news



◀ Our first ever European Girls' Mathematical Olympiad (EGMO) team, led by Team Leader Thanom Shaw and Deputy Team Leader Michelle Chen, returned from Italy earlier this year with a Silver, two Bronzes and an Honourable Mention.

The team consisted of Yifan Guo, Grace He, Alice Zhang and Ellen Zheng. The girls made us all proud of their hard work and achievements. This is part of an exciting initiative from AMT over recent years in trying to capture a more diverse audience of talented students.

You can read more about the team's exploits on the [AMT website](#), and also on their [blog](#).

digIT Game-design Workshop



At the [digIT](#) winter camp students had the chance to participate in an advanced game-design workshop.

Students embraced the opportunity to design, implement, and compile their own games using [Godot](#), a free MIT-licensed 2D and 3D game engine. According to Jessica Eustace, Information Technology Officer at Campbell High School and digIT Senior Tutor, 'Godot was a good fit for the digIT students as a follow on from the summer camp where students were exposed to GDscript, a language similar to Python. Students were introduced to the object-oriented programming paradigm, which can be considered a complicated programming concept which is better grasped using Godot.'

Godot is a powerful learning tool and has a wealth of support materials available for teachers such as [tutorials](#), API references and video [tutorials](#) that are readily available on YouTube for those who are more visual learners. Our digIT students shared they found the workshop hands-on, fun and interesting with students being able to take home their games and continue developing them at home.

Do you know someone who is passionate about ICT and would make a great mentor?



The Australian Mathematics Trust has opened applications for mentors from any ICT field across WA and SA to help students get a better understanding of ICT.

[digIT](#) is a program for year 9 and 10 students who are most at risk of falling behind in the digital age, generally regional students who show an aptitude in STEM and ICT themes. They participate in a week-long summer residential camp at the University of Western Australia (UWA) in January, followed by a six-month mentoring program, and conclude with a week-long winter residential camp back at UWA in July.

The commitment required of mentors is to attend a 1-day workshop at the January summer camp in Perth, spend at least 1 hour per month working with their mentee (via teleconference) for the next six months, and then attend a further 1-day workshop at the July winter camp in Perth. Flights, meals, and accommodation are funded by the program.

Interested ICT professionals can lodge an expression of interest by clicking on the banner above.