SHORT CIRCUIT

Coming Events:

November 10   *The 314th day of the year—Pi day! (one of several)*

November 13   *CMA Annual General Meeting and dinner - Erindale College, 7 pm.*

PD sessions

FROM THE EDITORS

The next major event on the CMA calendar is the dinner and Annual General Meeting. **Your invitation is on the last page of this newsletter**. It may be worth noting that attendance at the AGM counts as Professional Development for teachers.
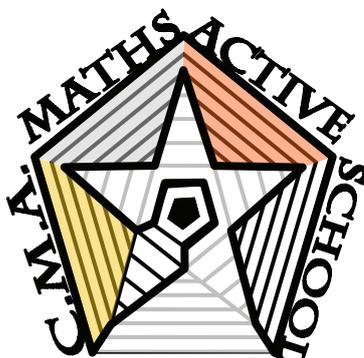
Leading up to this event committee members worry a little about who will step up to take on the tasks of running your professional association in the coming year. We encourage you to consider nominating to join the committee.

Still on matters administrative, we mention that memberships in CMA run from October to September, in line with our financial year. For this reason, people who join later in the new year tend to receive a bundle of back-issues of their chosen AAMT journal all at once. It is best to renew your membership early.

The membership application form is undergoing revision for 2014 and should appear on the website very soon.
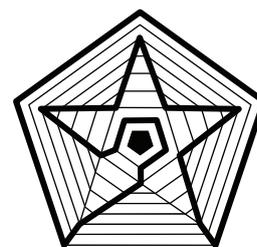
In the LINKS section on page two we have mentioned two AAMT initiatives: Top Drawer Teachers and Connect with Maths.

The latter will eventually have a number of *channels* through which people can be involved according to their professional interest. The first, for the Indigenous Learners community has been up-and-running for several months and the Early Years Learning community will launch soon. Others are planned. The project manager is Renée Hoareau who, incidentally, gave a talk explaining Connect with Maths at the CMA conference this year.

MATHS ACTIVE SCHOOLS

Talk to Jurek Paradowski about making your school a Maths Active School.

MEMBERSHIP

Membership of the CMA includes automatic affiliation with the Australian Association of Mathematics Teachers and a free AAMT journal.
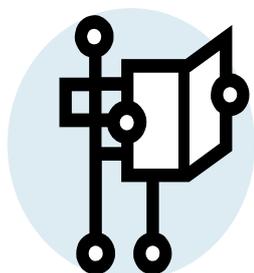
Members are entitled to cheaper rates for CMA professional development events and the annual conference.

A membership application form for the CMA can be downloaded from our website:
http://canberramaths.weebly.com/

Note:
Receipts for membership payments are normally sent out by e-mail. If you have paid for your membership but have not received a receipt or if your AAMT journal(s) have not been arriving, please advise CMA treasurer, Paul Turner, or a committee member.

MATHS IS EVERYWHERE

How successful are we at motivating students, teachers, governments and the world to take mathematics seriously? The following link to the ABC Radio National website and the Ockham's Razor program broadcast on 20 October, addresses this question.

The text of Stephanie Pradier's talk is well worth a read.

http://www.abc.net.au/radionational/programs/ockhams razor/maths-is-everywhere/5028094

PUZZLE—A COIN GAME

Consider a coin-tossing game in which two players initially have a certain number of coins each. At each toss the losing player pays the other a single coin. The game ends when one player has all the coins.

The question concerns the probabilities of each player winning the game, given particular initial dispositions of the coins.

In the simplest case, the players begin with one coin each. Clearly the game is over after one toss and each player has probability 0.5 of winning.

Suppose there are three coins. One player has two, the other, one. What are the probabilities of each player winning? Again, this is not hard to decide with the help of a tree-diagram and a geometric series.

A more difficult question seems to be, what are the probabilities if one player starts with three coins and the other, two?

In general, let one player have m coins and the other n. A shrewd guess, supported by simulation, suggests that the probabilities are in the ratio $m{:}n$, but how can this be proved?

Physics
You are watching a movie of an apple falling. It is accelerating downwards towards the earth.

At some point, time is reversed and the movie begins to play backwards. You see the apple moving up towards its original position

...and yet the apple is still accelerating downwards.

LINKS

http://www.madandmoonly.com/doctormatt/ mathematics/dice1.pdf - comprehensive collection of probability activities around dice.

http://topdrawer.aamt.edu.au AAMT Top Drawer Teachers website.

http://connectwith.indigenous.aamt.edu.au AAMT Connect with Maths site. Also, http://www.aamt.edu.au/Activities-and-projects/Connect-with-Maths

Mrbartonmaths resources, reviews, videos

http://www.improve.edu.au/ makes quizzes and tests, useful for NAPLAN training, can be used with or without Scootle, from Education Services Australia.

http://www.aamt.edu.au/Webshop resources available from AAMT

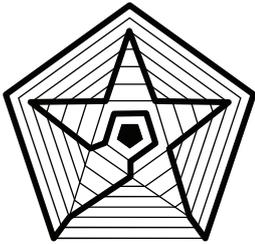www.mathematiciansinschools.edu.au CSIRO Mathematicians in Schools program.

i-APPS

Wolfram Alpha

Wolfram Calculus

Redshift   (astronomy)

Sky View (astronomy)

FRANGO CAMERA by Michael Barnsley

**NEWSLETTER OF
THE CANBERRA MATHEMATICAL
ASSOCIATION INC**

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Australia

E-mail: canberramaths@yahoo.com.au

We're on the Web!
http://canberramaths.weebly.com/

ABOUT THE CMA

The Canberra Mathematical Association (Inc.) is the representative body of professional educators of mathematics in Canberra, Australia.
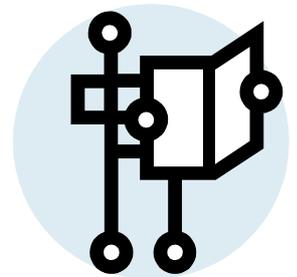
It was established by, among others, the late Professor Bernhard Neumann in 1963. It continues to run - as it began - purely on a volunteer basis.

Its aims include

* the promotion of mathematical education to government through lobbying,

* the development, application and dissemination of mathematical knowledge within Canberra through in-service opportunities, and

* facilitating effective cooperation and collaboration between mathematics teachers and their colleagues in Canberra.

THE 2013 CMA COMMITTEE

President	Erin Gallagher	Hawker College
Vice Presidents	Jurek Paradowski	Telopea Park School
	Sue Wilson	Australian Catholic University
Secretary	Theresa Shellshear	Australian Catholic University
Treasurer	Paul Turner	Erindale College
Councillors	Heather Wardrop	Lake Tuggeranong College
	Andy Wardrop	Erindale College
	Toby Hartley	Hawker College
	Jo Kellow	Stromlo High School
	Patricia Tandy	Melrose High School
	Peter McIntyre	University of NSW—ADFA
	Bruce Ferrington	Radford College Junior School
	Sheikh Faisal	Hawker College
	Elaine Hooke	Lake Tuggeranong College
	Bronwyn Norrie	Canberra Grammar School
	Michael Klinkert	Dickson College

Find us on Facebook

http://www.facebook.com/pages/Canberra-Mathematical-Association/110629419011275

SHORT CIRCUIT

The Shadow Tip

As quiet as a mouse, not tick tock, but shadow tip,
On bright days her quiet creep on slate, the Sun's counter trip,
Measures time, and time again, the day across, and seasons south and north,
And tilt, and Kepler's orb eccentric laws, she travels forth!
I marvel at her calculus! too clever for impostors, wind up watches, clunky clocks,
That beat discrete and slow and fast, no, gaze, in awe! With smooth science, time's truth to wise eyes, unlocks!

Ed Staples

*Ed's backyard sundial—
built with care and much
mathematics.*

You are cordially invited to attend the Canberra Mathematical Association 2013 ANNUAL GENERAL MEETING

Date: Wednesday, 13th November, 2013

Time: 7.00 – 10.00 pm

Cost: $30.00

Venue: Erindale College

– Class Act Restaurant

Drinks and a hearty meal will be briefly interrupted by the AGM

RSVP: Paul.Turner@ed.act.edu.au