

MATHEMATICAL ASSOCIATION



supporting mathematics in education

## Welcome to the MA monthly newsletter

The Mathematical Association  
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### MA journals

February saw the first issue of MA News produced by the new editor, Dave Pountney. It has produced much positive comment and long may that continue!

The March issue of the Gazette was received (in the UK) around 19 February. A document on <http://www.m-a.org.uk/the-mathematical-gazette> gives a detailed list of contents (with hyperlinks to the online version). This document also contains a look ahead to the July issue to whet readers' appetites.

The March issue of Mathematics in School is due out very soon. It is a 64-page bumper issue focusing on the life and work of the late Malcolm Swan. It is a very special issue indeed!



(Advertisement)

### Does your maths resource support maths mastery through problem solving?

Matific, an online primary maths resource that has proven to help improve maths test scores by 34%, is giving schools across the UK the chance to win over £50,000 in cash and prizes.

It's free to enter, so [Register now](#) and give your school the opportunity to win the prize of £1,000 cash! Hurry, as we are nearing the last date for registration.



## Branch Events in March

**Liverpool Branch**, Thurs 1<sup>st</sup> March 2018, 17:30-18.:30

Venue: Lecture Theatre B, Central Teaching Hub, University of Liverpool, L69 7BX  
Jonathan Histed: *Why do pigs and boomerangs fly?*

**MA ATM London Branch**, Saturday 3<sup>rd</sup> March, 10:00 -12:00

Venue: University College London, Institute of Education (UCL/IOE) Room 802 and 804, Main Building on Bedford Way, London WC1H 0AL  
Charlie Gilderdale: *Encouraging Curiosity in Mathematics*

**Sussex Branch**: Wednesday, 7<sup>th</sup> March 2018, 16:30

Venue: Roedean School, Roedean Way, Brighton, BN2 5RQ  
*Annual Problem Drive: Programme for the Academic Year 2017– 18*

**Yorkshire Branch**: Saturday, 10th March 2018, 11am for 11:15am

Venue: *University of Leeds, School of Mathematics, Room MALL 1, Leeds LS2 9JT*  
Tom Roper: *Teaching mechanics: assumptions, misconceptions and Newton's Laws*  
Lizzie Kimber: *Using rich tasks for teaching A level Mathematics*

**Yorkshire Branch**: Wednesday, March 21st 2018, 14:30-15:30

Venue: *University of Leeds, Rupert Beckett Lecture Theatre, Michael Sadler Building, Leeds LS2 9JT*  
Dr Paul Baxter: *W P Milne Lecture for Sixth Formers - Are large databases good for your health?*

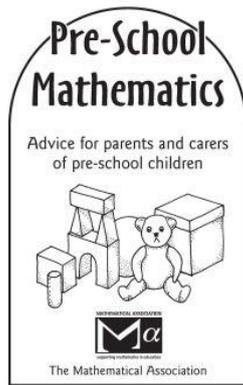
**MA ATM Cambridge Branch**: Friday 22<sup>nd</sup> March 2018, 16:30-18:30

Venue: University of Cambridge Primary School, Eddington Avenue, Cambridge CB3 0QZ  
*A local Teach Meet for anyone who teaches mathematics: primary, secondary, post-16*

Please see [website page](#) for further details.



## Pre-school Mathematics Booklet



[This A5 eight-page booklet](#) is intended to highlight mathematics in everyday situations and how such situations can be used to develop a child's mathematical understanding.

Mathematics surrounds a child from the earliest age and they need to make sense of the world into which they have been born. Children need adults to help them maximise the experience of their daily lives.

- A. Providing information and explanations
- B. Encouraging questioning by the child
- C. Developing confidence to ask if they are unsure
- D. Providing attainable and challenging experiences
  - Too hard and they become distressed
- Too easy and they become bored

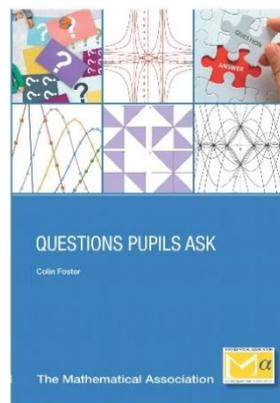
£4.99 for 10  
 £14.99 for 50  
 £26.99 for 100

### Questions Pupils Ask

If two minuses make a plus, why don't two make a minus? Is there a formula for  $\pi$  and why isn't  $\pi$  a whole number? In [this collection](#) of over 40 articles from the *Mathematics in School* and *Symmetry Plus*, Foster takes *Questions Pupils Ask* about mathematics as his starting point for a reflections on learning and teaching secondary mathematics.

Also included are articles addressing a array of mathematical topics, spanning algebra, geometry and statistics, and puzzles, applications of mathematics to daily tasks to take into the classroom.

**Members: £15.95**  
**Non-members £13.45**



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### The intersection contains a conference



The MA and ATM are delighted to announce that there will be a jointly badged Annual Conference in 2019 at Chesford Grange, Warwick. More details to follow soon!



### **British Congress of Mathematics Education April 2018**

[Only a few places left](#) (and maybe not any by the time you read this) for BCME 2018, the annual conference for mathematics educators that combines the ATM and MA conferences this year and is taking place 3-6 April at the University of Warwick. Please book your sessions as they are filling up quickly!



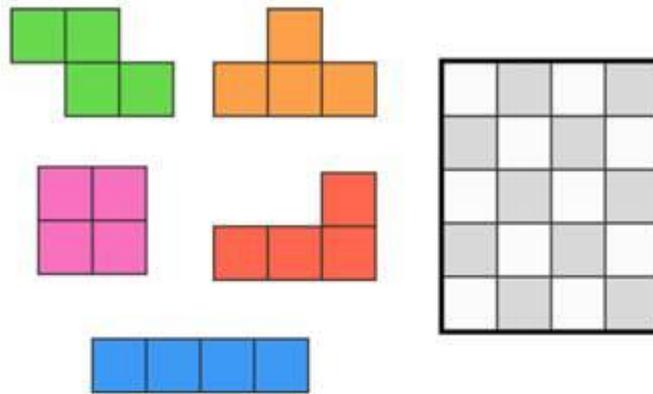
### **National Numeracy Day**

16<sup>th</sup> May will be the first ever National Numeracy Day. '*We are all numbers people*' is our theme for 2018 and will focus on helping more adults to understand how and why they should improve their numeracy level, with a particular focus on managing family finances and better employment prospects.

Supported already by the Ufi charitable trust, KPMG and Experian, and fronted by Martin Lewis, Rachel Riley and Andy Haldane, it will aim to raise awareness of the importance of numbers in everyone's lives and encourage action to increase numeracy levels across the UK.



### **Tetrachess**



If I have 5 colored shapes shown that I can rotate, and I use each shape once, is it possible to place them so they fit perfectly in a  $5 \times 4$  rectangle?

**Hint:** Notice the checkerboard pattern of the rectangle, and consider how the shapes would be colored if they followed the same pattern.

This problem of the week from the Brilliant Club is a lovely one – enjoy!

<https://brilliant.org/weekly-problems/2018-02-26/basic/>

*Compiled by Lucy Rycroft-Smith*