



## Welcome to the MA monthly newsletter

The Mathematical Association  
259 London Road  
Leicester LE2 3BE  
Email: [office@m-a.org.uk](mailto:office@m-a.org.uk)

April 2019

Advertisement

### Pearson Opportunities

Pearson have exciting opportunities for qualified Mathematics teachers to become examiners for our GCE A Level qualification.

This is an excellent opportunity to:

- Develop your career in education
- Earn some extra money in a part time role, alongside any full time commitments you may have.
- Gain invaluable insight into assessment.



To find out further information please visit

[https://home.edexcelgateway.com/pages/job\\_search\\_view.aspx?jobId=2697](https://home.edexcelgateway.com/pages/job_search_view.aspx?jobId=2697)

### Ems Lord 2019-20 President



The Mathematical Association is delighted to announce that Ems Lord, the Director of NRICH, became the MA's President for 2019-20. Ems has taught across the key stages from early years to A Level Further Mathematics, has worked as a local authority consultant, led a large Mathematics Specialist Teacher Programme, and taught on initial and post-graduate mathematics education programmes.

## New Council Members

A warm welcome to our new council members Ed Southall, Owen Toller and Professor Jennie Field (members without office) as well as Dr Hannah Fry (President Designate). A full list of current members is here <https://www.m-a.org.uk/nominations-for-council>

## ICME-14 in Shanghai 12-19 July 2020



We are delighted to announce that the International Programme Committee of the International Congress on Mathematical Education (ICME) has accepted The United Kingdom of Great Britain and Northern Ireland application to present a National Presentation (NP) at ICME-14 in Shanghai from 12<sup>th</sup> – 19<sup>th</sup> July 2020.

The National Presentation is an important activity in the Congress, aiming at displaying unique mathematical culture and presenting the history, state and trends of mathematics education of a particular country.

## Annual Conference 2020

**Annual Conference**  
14-16 April  
WYBOSTON LAKES  
RESORT, BEDFORDSHIRE  
**2020**  
EXPLORATION AND INSIGHTS

We are delighted to confirm the date of our next jointly badged annual conference: 14<sup>th</sup> -16<sup>th</sup> April 2020. The Mathematical Association and the National Association of Numeracy and Mathematics in Colleges (NANAMIC [www.nanamic.org.uk](http://www.nanamic.org.uk)) invite you to join us at the stunning Wyboston Lakes.

Our conference theme *Exploration and Insights* is intended to offer members an invaluable opportunity to explore new ideas in a lakeside setting designed to maximise

face-to-face learning and sharing. As an organisation we are responding to the financial challenges faced by many schools by restructuring our conference packages. Members will soon be able to select from a competitively-priced range of cost-effective options - from half days and single days to the full conference experience – we are particularly excited to offer our innovative ‘middle day’ option offering a full day of classroom-focused workshops, with optional evening BBQ and quiz which we hope will prove very attractive for our teaching members.

Delegates, and their partners, should note that the venue also offers a superb range of leisure facilities and a relaxing spa which are all available at an additional charge. Check out the venue here [www.wybostonlakes.co.uk](http://www.wybostonlakes.co.uk).

## Sir Michael Atiyah Celebration

An event was held this month at Edinburgh University celebrating the life of Sir Michael Atiyah. Bill Richardson attended alongside 120 attendees. His notes on the event can be read here <https://www.m-a.org.uk/resources/Atiyah-Sir-Michael-Event-Notes-6-4-19.pdf>

## Twenty Years of PMC!



Primary Mathematics Challenge is celebrating its 20<sup>th</sup> year and celebrations began at the MA AGM with a delicious birthday cake to be enjoyed by all attendees.

We are marking the 20 year anniversary with a 20% off promotion and the November 2019 paper will have easier problems to encourage primary teachers to enter more of their pupils. We are also working on a new ‘Challenge Your Pupils’ book to join the others in the series. Watch this space!

## First Mathematics Challenge

Involved in Maths Week London? We will give special permission for schools in London to take the First Mathematics Challenge a week early! Order your packs by 3rd June and all packs sent to London addresses will be posted ready for the 10th June 2019!

Order packs here [www.primarymathschallenge.org.uk/fmc](http://www.primarymathschallenge.org.uk/fmc).

Andrea has 5 coins. Two of the coins are the same.  
The total amount of money that Andrea has is less than £1.  
What is the largest possible amount of money that Andrea could have?



A 98p

B 97p

C 96p

D 95p

E 94p



## 20,000 Twitter Followers!



The Mathematical Association surpassed 20,000 followers on Twitter this month! Many thanks to David Miles for running the account so successfully. We continue to support and appeal to the online mathematics community with our account @Mathematical\_A.

## Equals Online

The latest edition of Equals Online (Vol 24.1) will be published this week  
<https://www.m-a.org.uk/equals-online>

## Branch Events

**Date:** Saturday 11 May 2019

**Branch:** London

**Title:** An A Level Further Maths Special

**Presenter:** Jonny Griffiths

**Time:** 10 to 12.30

**Location:** UCL Institute of Education, Elvin Hall, 20 Bedford Way, London WC1H 0AL

**Summary:** This session will entail Jonny Griffiths leading us through a selection of his latest Risps. Here's his explanation:

"Back in 2005, I began to write my Risps (short for Rich Starting Points) website, with the backing of the Gatsby Foundation. It took a year, and by the end of that time I'd posted forty pure investigative activities for A Level Maths. Since then, the site has gradually become popular, and that's happened alongside a growing interest in using open tasks to teach mathematics at all levels. A couple of years ago, I took

what seemed to me to be the obvious next step; how about a collection of Risps for pure Further Maths A Level? It could be argued that Further Maths sees a larger percentage of teacher exposition than elsewhere, and yet FM students are often well-suited to self-study and tackling problems under their own steam. Over the next two years, I wrote Further Risps, and I've recently self-published that both as a hard copy book and as a pdf. I don't stick to any particular syllabus, but any Further Maths teacher should find that the majority of the forty tasks here will be adaptable for their students' situation. I hope during my workshop to encourage people to try a task from the collection, and then enter into a discussion about how such material can sensibly be integrated into an A Level course. I also hope to offer some tips on how a teacher might write open tasks of their own."

**Door Charge:** The charge will be £10 cash to be collected on the door unless you have already attended an event this academic year and already paid your £10. All sessions are free for teachers in their initial training year.

**Date:** Monday 10 June 2019

**Branch:** Cambridge

**Title:** Every classroom has a mix of attainments and future potentials

**Presenter:** Mike Ollerton

**Time:** 4:30-6.00

**Location:** Faculty of Education, Donald Macintyre Building, 184 Hills Rd, Cambridge CB2 8PQ

**Summary:** Mike is passionate about making mathematics accessible, interesting and enjoyable to those he teaches so prepare for a hands on session to end the year!

**Door Charge:** Free to members. Others pay £5. Doors open at 4.

**Date:** Wednesday 26 June 2019

**Branch:** Exeter

**Title:** The Symbols and the Symbolised

**Presenter:** Pete Griffin – Assistant Director in the Secondary team at the NCETM

**Time:** 6.15 - 8.00 (coffee from 6.00)

**Location:** Exeter Mathematics School, Rougemont House, Castle Street, Exeter, Devon EX4 3PU

**Contact:** Please email [Richard Perring](#) as spaces are limited and allocated on a first come first served basis.

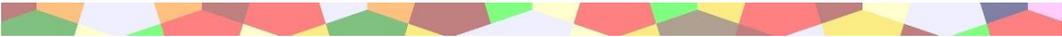
**Summary:** We can be lured into thinking that the symbols we use in mathematics are the mathematics itself. During the session we will explore some mathematical situations and think about ways in which learners might be given some control over symbolising these situations themselves. Suitable for teachers of mathematics from upper primary or secondary schools.

Pete began his career as a secondary teacher of mathematics and taught in secondary schools for 8 years, firstly in North London and then in Hertfordshire. He moved into Local Authority advisory work in 1986 first as an advisory teacher and then as a mathematics adviser and remained in this role for 20 years, working in two large local authorities (with a brief secondment to work at the Open University as a lecturer in mathematics education from 1988 to 1990). It is during this time that he became

involved in designing professional development opportunities for both primary and secondary colleagues and became convinced of the importance of a rich and varied provision of CPD for all teachers.

**Door Charge:** Free

See <https://www.m-a.org.uk/branch-events> for further details.



## CPD Event

**Date:** Saturday 6 July 2019

**Venue:** Mathematical Association Headquarters, 259 London Road, Leicester, LE2 3BE

**Title:** Praying souls out of purgatory: ratio and proportion in the secondary classroom.

**Presenter:** Peter Ransom

**Time:** 10:00 – 16:00

**Summary:** A one-day professional development event for all those who are involved in teaching ratio and proportion at secondary level.

**Cost:** £59 MA members, £84 non-members

**The Mathematical Association is delighted to invite you to apply for a day of professional development on teaching ratio and proportion at secondary level.** *The MA is an accredited NCETM mathematics CPD provider.*

The focus of this day will be on teachers and teaching assistants who have to teach ratio and proportion and wish to develop their understanding of the theory and pedagogy behind ratio and proportion. They will leave with a host of ready-made materials to be used in the classroom, some of which will have been developed during the day. The day will be followed up with a 7, 7, 7 set of materials (materials sent out 7 days, 7 weeks and 7 months later) to help with participants' teaching of ratio and proportion.

Peter taught mathematics and in state secondary schools from 1977 to 2010. Since then he has been employed as a tutor on the PGCE course at Bath Spa University, works with the Princes Teaching Institute and has authored books on Revision materials for Key Stage 3, Core Mathematics and Additional Mathematics for a number of publishers. He is the Chair of Council of The Mathematical Association and a Past President.

Online booking now [open](#).

## Publications

### Padlock Challenges Rachael Horsman

Padlock Challenges are a motivating, innovative and practical way to enable students (KS3 and KS4) to engage with Number and Algebra, Statistics and Probability and Geometry. Each book has a comprehensive set of worksheets from which teachers can construct their own pupil booklets or classroom posters containing a selected set of challenges. Each challenge is carefully constructed to enable students to gain confidence and skills. The conclusion of each challenge is a number determined by their answers, collectively these lead to the combination for a padlock, and the route to opening a designated treasure box secured with a chain and combination lock. Find the combination – gain the treasure within

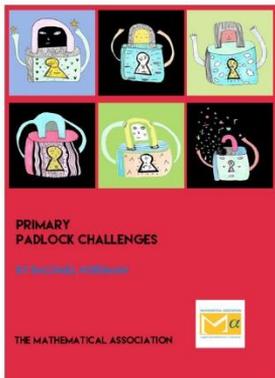
**Each book is priced competitively.**

**Non-Members £10.00**

**Members £7.00**



### Primary Padlock Challenges Rachael Horsman



This exciting book for KS1 and KS2 from Rachael Horsman, follows the same format as the very successful KS3 and KS4 Padlock Challenge series. As per the format of the previous books, it has a comprehensive set of worksheets from which teachers can construct a set of challenges. Each of the challenges is constructed to enable students to gain in both confidence and skills. The conclusion of each challenge is a number determined by their answers and collectively these lead to the combination for a padlock. The route to opening a designated treasure box secured with a chain and combination lock follows. Find the combination – gain the treasure within.

We are sure primary level pupils will find this book exciting and challenging.

**Non-members £9.00**

**Members £6.30**

<https://members.m-a.org.uk/Shop>