December 2018

Season's Greetings from The Mathematical Association!

The Mathematical Association is pleased to offer exciting discounts on publications throughout Advent!

Open the doors of the advent calendar on The MA website for daily special offers.

The MA President 2020 - 2021

The Mathematical Association is delighted to announce that Hannah Fry is to be the 2020-21 President.

Dr Hannah Fry is Lecturer in the Mathematics of Cities at the Centre for Advanced Spatial Analysis at UCL. She works alongside a unique mix of physicists, mathematicians, computer scientists, architects and geographers to study the patterns in human behaviour - particularly in an urban setting. Her research applies to a wide range of social problems and questions, from shopping and transport to urban crime, riots and terrorism.

Personal, Trainee and NQT Membership Renewal Notices

Personal, Trainee and NQT Members look out for your Renewal Notice to ensure you receive your journals in 2019 and **remember**, if you renew **before 31st January you can claim a £5 discount** off your fee. The £5 discount is also offered to those who renew by the annual direct debit scheme.

This coming year we are also pleased to offer a **monthly direct debit scheme**, which does not attract the £5 discount, but does allow easy payment of the fee over a 12-month period.

Membership renewal can be done online at https://www.m-a.org.uk/personal-membership or by completing the form at the bottom of the letter we sent to you and returning it to us with your payment.

Equals Online

The autumn issue of *Equals* is now available at https://www.m-a.org.uk/equals-online. This is a special edition which commemorates Ray Gibbons' extensive work for the MA and *Equals*.

PMC News

Nearly 1600 schools have taken part in the PMC this year and are currently celebrating the achievements of their pupils. See our Twitter account @PMC_Maths for all the lovely photos we've been sent! Each school awards its certificates according to the levels achieved in school. Children who achieved 19 and above have been invited to take part in the Bonus Round early in 2019. Read more in our

newsletter: http://www.primarymathschallenge.org.uk/newsletter
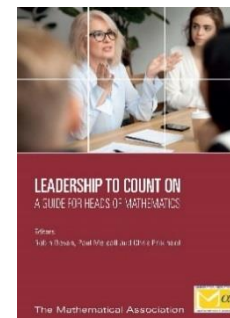
Publications

Leadership to Count On (Second Edition)

Leading a mathematics department is a challenging and rewarding task. At the outset it can be daunting. After many years of experience, there is still much to learn about the effective and efficient management of a department.

This book offers clear advice to subject leaders, who have the potential to serve as role models for other teachers of mathematics. Written by a team of experienced subject leaders, it provides authoritative recommendations, practical examples and detailed case studies.

Leadership to Count On has been updated to take account of recent advice and guidance as well as curriculum changes.

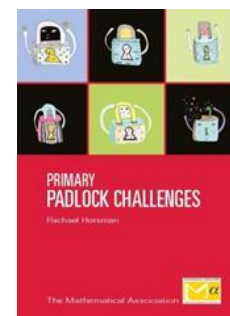**Price: Non-members £14.00 – Members £9.80**

Primary Padlock Challenges

This exciting new book for primary pupils from Rachael Horsman, follows the same format as the very successful secondary 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 led to a 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 pupils will find this book exciting and challenging.

Price: Non-members £10.00 – Members £6.30

2019 Calendar

Another fabulous selection of mathematically inspired photographs and problems to solve. There is a space to write next to each day. When folded the calendar is A4 size, but opens out to A3 when hung on the wall. Suitable for the home, school and office. It is intended that the calendar will encourage teachers and young people to think about the wide variety of context in which mathematics can be found in the world around us.

£6.00 each or £5.00 if two or more are ordered (including VAT)

Sign up for the Annual Conference

The MA/ATM Annual Conference in 2019 is at Chesford Grange, Warwick from **15-18 April**. The theme of the conference will be *Mathematics. Collaboration. Creativity*. Remember the **early bird rate offer ends 31/01/19**. You can sign up [here](#).

Branches Committee is pleased to announce that one bursary of £499 is available to cover the full residential cost of attendance at the 2019 Joint MA/ATM Conference. Applications are encouraged from anyone satisfying the following conditions. He/she will be:

- A first time delegate at a MA conference
- A paid up member of the MA before 31 March 2019
- Prepared to write a report on his/her experiences at the conference for publication in MA News, MA website, etc.

For full details and to apply see www.m-a.org.uk/branches.

Branch Events

Branch: London
Title: Topics in Depth / Asking Better Questions
Presenters: Jo Morgan (@mathsjem) and Ed Southall (@solvemymaths)
Summary: Jo's workshop is about the process of teaching a topic in depth. The focus will be on index notation and index laws. In this session, teachers will reflect on their approaches, consider misconceptions and best practice, and discover new resources to use in their lessons. Ed's session will look at "Asking Better Questions". Enhanced subject knowledge can lead to stronger, deeper questions that allow for teachers to uncover more misconceptions and analyse how much students understand topics beyond algorithms.
Date: 19th January 2019
Time: 10 am - 12.30 pm
Venue: UCL Institute of Education, Room 802/804, 20 Bedford Way, London WC1H 0AL.
Branch Contact : **Mark Horley**
Door Charge: £10 collected in cash on the door, unless you have already attended an event this academic year and already paid your £10. All sessions are free for Trainee Teachers in their initial training year.
Please sign up via **Eventbrite**.

Branch: Exeter MA/ATM
Title: Algebradabera!
Presenter: Dietmar Küchemann
Summary: In early 2018, Dietmar started posting sets of algebra tasks on Twitter (via his alter ego @ProfSmudge) and writing more extensively about them in a blog at **http://mathsmed.co.uk/ALGblog/**. The tasks are intended to help students make sense of school algebra, by focussing on structure. Some of the tasks will help teachers, as well as students, think about the 'purpose and utility' of algebra. In this interactive session, Dietmar will work through some of the tasks and consider how they might be used in the classroom and will share any experiences participants might have had of trying them with their students. In the past 10 years Dietmar has worked mainly on the ICCAMS project, where, through close collaboration with teachers and interviews with small groups of students, he helped develop lesson materials in algebra and multiplicative reasoning. The focus has been on Key Stage 3, though the materials are also relevant to younger and older age groups. Dietmar is now semi-retired and divides his time between London and a quiet retreat on the edge of Exmoor.
Date: 6th February 2019
Time: 6.15pm – 8pm (coffee from 6pm)
Venue: 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.
Cost: Free

NSPCC Number Day

The NSPCC is encouraging schools across the UK to take part in their 'Number Day' on Friday 1st February 2019. Number Day is a maths-inspired fundraising day for children in nursery right through to secondary school, with free downloadable activities suitable for all ages and abilities. Some of these fun curriculum-based activities take inspiration from famous gameshows including *Blockbuster* and *Who Wants to Be a Mathionnaire?.* Pupils are also encouraged to *'Dress Up For Digits'* and make a donation to wear an item of clothing with a number on it. The NSPCC are encouraging schools to sign-up to Number Day 2019 by visiting www.nspcc.org.uk/numberday.

Compiled by Jo Morgan