MATHEMATICS: BEYOND THE TEXTBOOK – January 2018

DCBEAGLE Challenges ~ Douglas Buchanan

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Happy New Year to you!

Welcome to a new calendar year. 2018 - has an interesting set of dates:

January 1 is on a Monday, February 2 is on a Monday. March 3 is on a Monday and this continues throughout the year. A great fact about 2018.

Learning a musical instrument

Have you ever thought how many children (and adults) would enjoy learning a musical instrument if they were told that they would not be allowed to touch the instrument until all the notation is learned and the theory of music is understood? Not many! Is that what many are doing in the maths lessons – churning through pages and pages of examples and not applying the concepts to the "real world"?

A **must read** is a paper written by Paul Lockhart, "A Mathematician's Lament" – click here – which is on the Mathematical Association of America website. It is amusing, thought-provoking and an easy read.

Compendium of Games

Why Play Games in Mathematics lessons?

This is a question posed on the Suffolk Maths homepage – click here. NRICH lists the benefits of playing games – click here for the detailed descriptions:

- Meaningful situations
- Motivation
- Positive attitude
- Increased learning - opportunities to test intuitive ideas and problem solving strategies
- Different levels - Games can allow children to operate at different levels of
- Assessment - children's thinking often becomes apparent through the actions and decisions they make during a game, so the teacher has the opportunity to carry out diagnosis and assessment of learning in a non-threatening situation
- Home and school - Games provide 'hands-on' interactive tasks for both school and home
- Independence - Children can work independently of the teacher. The rules of the game and the children's motivation usually keep them on task.

The Suffolk website has a large compendium of game ideas which is assessible to the pupils to find their own activities.

DCBEAGLE Challenges

This is my busiest term and new venues have been added to my portfolio. Sadly, due to my full programme of challenges I do not have the time to host puzzling days for the rest of the academic year.

Tuesday	16 January	Year 4 Maths	Red Maids' High, Bristol	No places left
Thursday	18 January	Year 4 Maths	Bryanston School, Dorset	
Friday	19 January	Year 6 Maths	Bryanston School, Dorset	1 place left
Monday	22 January	Year 5 Maths	Portsmouth Grammar Junior	
Tuesday	23 January	Year 6 Maths	Eagle House, Berkshire	2 places left
Thursday	25 January	Year 5 Maths	Bristol Grammar School	No places left
Monday	29 January	Year 4 Maths	St Gabriel's Newbury	Private
Tuesday	30 January	Year 4 Maths	St Faith's Cambridge	2 places left
Thursday	01 February	Year 4 Maths	Ryde School, IOW	
Thursday	01 February	Year 5 Maths	Ryde School, IOW	
Friday	02 February	Year 5 Maths	St Gabriel's Newbury	Private
Monday	05 February	Year 6 Maths	St John's Beaumont	
Tuesday	06 February	Year 4 Spell It!	Eagle House, Berkshire	3 places left
Tuesday	20 February	Year 5 Maths	Belmont (Mill Hill)	No places left
Thursday	22 February	Year 5 Maths	Langley Preparatory Norwich	
Friday	23 February	Year 6 Maths	Langley Preparatory Norwich	
Thursday	01 March	Year 4 Maths	Christ's Hospital, Horsham	No places left
Friday	02 March	Year 5 Maths	Wrekin College Shropshire	
Monday	05 March	Year 4 Maths	Gayhurst, Bucks	
Tuesday	06 March	Year 4 Maths	West Hill Park, Fareham	NEW VENUE
Thursday	08 March	Year 5 Maths	Elmhurst School, Croydon	
Friday	09 March	Year 6 Maths	St Gregory's, Harrow	Private
Tuesday	13 March	Year 4 Maths	Newcastle High for Girls	
Wednesday	13 March	Year 5 Maths	Newcastle High for Girls	
Wednesday	14 March	Year 5 Maths	Newcastle High for Girls	
Monday	19 March	Year 5 Maths	Abbot's Hill Hemel Hempstead	NEW VENUE
Tuesday	20 March	Year 5 Maths	Wolverhampton Girls' High	NEW VENUE
Thursday	22 March	Year 5 Maths	Christ's Hospital Guildhall in London	Private

Visit the Portfolio page on my website to access the booking forms.

Napier's Bones

The template for the strips of numbers can be found here. Scottish mathematician, John Napier, created this calculating tool over 400 years ago. Give the worksheet – click here – from New Zealand Maths website – and challenge your able young mathematicians to work out how they can be used.

Have a good Spring Term – the days are getting long in the United Kingdom!