News

There are two main things we need to talk about in this newsletter. Firstly, Dr Gadd is leaving us, after two years at Camp Hill. Because of this, we decided to ask him to tell us some of his favourite mathematical things, and we'll tell you what they are in a minute. The other thing is that, after finishing in third place for the last two years running, we have finally won the Edge Hill Maths Challenge! Dr Taylor accompanied two teams from Camp Hill to Edge Hill University on Wednesday 4th July, along with two cakes to bribe the judges with, and it appears to have worked! Last year, every team seemed to take a cake, but this year every team except ours forgot, so we won! Although I'm sure our girls did some good maths too. It can't have been all about the cakes.[1]

Maths Puzzle

Dr Gadd's favourite maths puzzle is the **Four Fours Puzzle**. Basically, it's like Countdown, but you have to try to make each of the numbers from 1 to 20 using only four fours.[2] Some are more difficult to make than others. Also, can you go beyond 20? If so, how high can you go? What is the first number that it is impossible to make using only four fours?

Maths Word

Dr Gadd's favourite maths word is **extrapolation**, which means predicting or estimating something by assuming that current trends will continue.

Exterior Angles

Dr Gadd's favourite mathematical fact is that the exterior angles in any polygon always add up to 360°. Although it's not particularly difficult to show why this is the case, it is still quite a surprising fact the first time you find out about it. After all, when you think about angles in a polygon, it's the interior angles that seem to be the friendly ones, and the exterior ones are just these strange things that you would never have even thought to give a name to until your teacher told you about them – and then it turns out that it's the exterior angles that are easy to calculate and the interior angles that are tricky. Can you remember how to calculate interior angles?[3]

Joke

There are two types of people in this world:

1) Those who can extrapolate from incomplete data

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1. You can find out all about the Edge Hill competition on the back of this sheet.
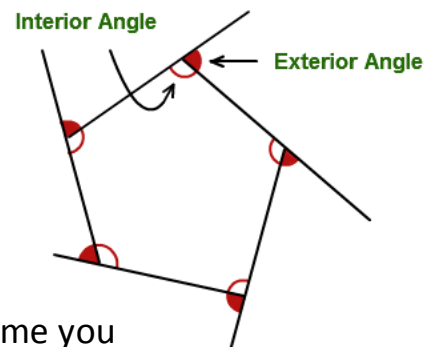2. Unlike Countdown though, you have to use all four of the fours.
3. Obviously we can only calculate interior angles for regular polygons, but the exterior angles add up to 360° for any polygon – even really weird ones.

Edge Hill University Maths Challenge 2018

On Wednesday 4th July, two teams of Year 9 mathematicians and Dr Taylor set off to Ormskirk, near Liverpool, for the national finals of the Edge Hill University Maths Challenge.

This is a national competition that we enter every year and for the last two years running we have finished in third place, which is pretty good when you consider that there are hundreds of teams who enter.

This year, like last year, we had two teams who made it through to the final fourteen teams: The Mathletes (along the back row of the photo above) were Maleeha Ahmad, Aleeza Butt, Lucy Barrell, Naina Gupta and Mushkan Pradhan, and '2 ∞ and Beyond' (along the front) were Roxanne Efa-Quayson, Isabella Smith, Jess Sandhar and Teesta Maulik.

For several weeks, the teams have been working to solve two challenging maths problems, testing their logical reasoning and their understanding of geometry, algebra and mechanics. Their posters had already seen them through to this stage of the competition and they now had to present their results to the judges. Both teams did exceptionally well. The judges were impressed by their mathematical technique, confidence, humour and musicality. (The teams definitely did not just try to bribe the judges with cake!)[4].

We are delighted to announce that the Mathletes took first place and returned to school with graphical calculators, which we are sure they will put to good use.[5]

4. They did.
5. If you are currently in year 8, you will be able to enter this competition next spring.