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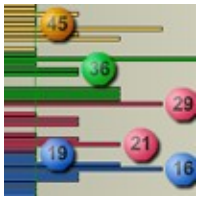
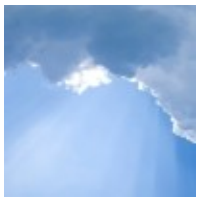
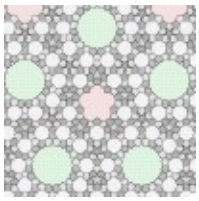


Understanding uncertainty: A league table lottery
This is the very first installment of a new feature in *Plus*: a column by David Spiegelhalter exploring issues of risk and uncertainty that concern all of us but confound many of us. We start with a look at league tables.



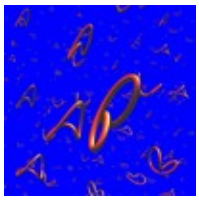
An almighty coincidence
Life is full of coincidences, but how do you work out if something is really as unlikely as it seems? In this article **Rob Eastaway** and **John Haigh** find chance in church and work out the odds.

The tiger that isn't: numbers in the media
NHS budgets, third world debt, predictions of global warming, inflation, Iraqi war dead, the decline of fish stocks or hedgehogs, the threat of cancer there's hardly a subject people care about that comes without measurements, forecasts, rankings, statistics, targets, numbers of every variety. Do they illuminate or mislead? Introducing their new book, **Michael Blastland** and **Andrew Dilnot** take a look at numbers in the media and show that a little maths goes a long way in unravelling dodgy media claims.



The trouble with five

Squares do it, triangles do it, even hexagons do it but pentagons don't. They just won't fit together to tile a flat surface. So are there *any* tilings based on fiveness? **Craig Kaplan** takes us through the five−fold tiling problem and uncovers some interesting designs in the process.



String theory: From Newton to Einstein and beyond

Over the last few years the words *string theory* have nudged their way into public consciousness. It's a theory of everything in which everything's made of strings or something like that. But why strings? What do they do? Where did the idea come from and why do we need such a theory? **David Berman** has an equation−free introduction for beginners.

A tale of two curricula: Euler's algebra text book

In the fourth and final part of our series celebrating 300 years since Leonhard Euler's birth, we let Euler speak for himself. **Chris Sangwin** takes us through excerpts of Euler's algebra text book and finds that modern teaching could have something to learn from Euler's methods.

Career interview: Mathematical modelling consultant

Jet engines, aircraft carriers and telecommunications networks these are just some of the things that Nira Chamberlain has modelled. And while he's figuring out defence logistics, he's also pursuing a pure mathematical interest in games. Find out what mathematical modelling can do and why it can also make you slim and fluent in French.

Teacher package: Complex numbers

Complex numbers what are they, how do they work and what do they have to do with computer−generated movies, fractals and chaos? This teacher package brings together all *Plus* articles on complex numbers and gives some handy links to related problems on our sister site NRICH.

Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.