## Add some fun

## **Maths** Ages 11-14

In other subjects you can be creative, but not in maths – or can you? Why not ask pupils to invent their own maths? Coming up with their own ideas is liberating and also helps them to see mathematics as a growing subject, not set in stone.

For example, you could ask Year 7 pupils the question: "What kinds of numbers are there?" They might say odd, even, prime, square, triangle, Fibonacci or palindromic depending what they've come across.

What else could they come up with that's new to them? We have odd numbers, but what about odd odd numbers (1, 5, 11, 15 etc) or triply-odd? What patterns are there? We have square numbers – can you make sense of round numbers? We have triangle numbers – what about rectangle numbers or pentagon numbers? What about scalene triangle numbers or isosceles triangle numbers? Do these ideas make sense? Why or why not?

Once pupils start asking: "What if we had...?" or "Why don't we have...?" or "Wouldn't it be easier/better/quicker/more interesting if we had...?" they are on the way to developing into creative and inventive mathematicians

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