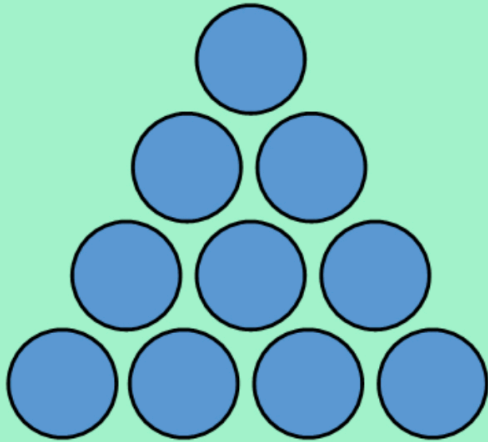


Brain teaser

Can you move just three pennies and flip this triangle up-side down?

Can you prove it?



Mathematical Magic—1089

Pick a 3-digit number where the first and last digits differ by 2 or more...

- Consider the "reverse" number, obtained by reading it backwards.
 - Subtract the smaller of these two numbers from the larger one.
- Add the result to its own reverse.

Try it on your friends and family!



Pythagoras

(570BC —495BC)

Pythagoras is one of the most well known mathematicians. Even if you haven't studied trigonometry, you would have heard of his theorem.



However, what people tend not to know is that there is no clear evidence to link the theorem to Pythagoras. In fact, the theorem was said to have been discovered by the Babylonians prior to Pythagoras' rise in mathematics.

So how come Pythagoras got all the credit?

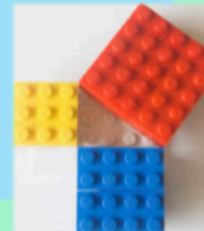
Although he did not discover the theorem, he was the first mathematician to notate and prove it.

In mathematics, the proof is just as important as the theorem. Theorems are not accepted in mathematics unless it has been vigorously proven.

$$a^2 + b^2 = c^2$$

Can you try and prove it?

(Hint: A visual way to prove it is on the right!)



Have you seen some maths in everyday life?

Have you seen a geometric natural phenomenon?

Email **Miss Pickett** with your pictures to be in with a chance to be entered into a competition!

20				30			
96		324					
				405			3
180							
				600		30	
		2835					
4							

Like a conventional Sudoku, this Product Sudoku has two basic rules:

1. Each column, row and 3×3 subgrid must have the numbers 1 to 9.
2. No column, row or subgrid can have two cells with the same number.

The puzzle can be solved with the help of the numbers in the top parts of certain cells. These numbers are the products of the digits in all the cells horizontally and vertically adjacent to the cell.