

Everyone can have a go

Some of you may find these difficult

Most of you will find these difficult





Maths challenge



BROKEN GALGULATOR

Use the keys on this broken calculator to make the totals from one to ten. Five has already been done as an example.

Mr Alesh



Complete the following using all of the numbers

1, 2, 3, 4, 5, 6

to find the smallest odd number





Mrs Kelly



Arrange the numbers 1 to 9 inside the square below.

The sum of each row and column must be equal to 15.

Mr Riley



Each row and column contains all the digits 1 to 4.



Mrs Brace





How many triangles can you see.....?

Maze

Start with zero.

Find a route from 'Start' to 'End' that totals 100 exactly.



Which route has the highest total? Which has the lowest total?

Now try some different starting numbers.

Mr Moore





1cm

1cm



How many centimetre cubes can fit in a meter cube?



Mr Hooper



Highcliffe School

Maths challenge



A clumsy snail fell into a well and is now stuck at the bottom. The well is 30m deep, to escape the snail must climb its way up the slippery walls of the well. In one day the snail can climb 3m up the well. It is hard work and takes the snail all day. It then needs a good nights sleep, the only problem is that when it is sleeping it slides 2m back

down the wall.

The snail keeps up this routine of climbing 3m each day then sliding back 2m each night.

How many days does it take the snail to escape from the well?

Think: How could you convince someone else that your answer is correct? Can you think of your own version of the problem?

Mr Cooper



3	2		4		5	6	1	8
	7	6						
8	5			6		3		
		2	5		3		9	
				9				
	3		7		6	5		
		7		3			6	1
						2	4	
2	1	3	6		9		7	5

The classic **Sudoku** game involves a grid of 81 squares. The grid is divided into nine blocks, each containing nine squares. The **rules** of the game are simple: each of the nine blocks has to contain all the numbers 1-9 within its squares. Each number can only appear once in a row, column or box.

Mrs Chipchase



Make 6

You can only use two maths symbols (including factorials and square roots) to make 6

- 0 0 0 = 6
- 1 1 1 = 6
- 2 2 2 = 6
- 3 3 3 = 6
- 4 4 4 = 6
- 5 5 5 = 6
- 6 6 6 = 6
- 7 7 7 = 6
- 8 8 8 = 6
- 9 9 9 = 6

Mr McLeish









Mrs Alldis-Smith

A man has brought 81 rubies to a gemologist for valuation. The rubies are all the same size, but the man knows that one of them is a fake and weighs slightly more than the real rubies.

Using this information, how can the gemologist identify the fake ruby using a pair of scales by making just four weighings?



Maths challenge

Four copies of the triangle shown are joined together, without gaps or overlaps, to make a parallelogram. What is the largest possible perimeter of the parallelogram?

Highcliffe School

A 46 cm B 52 cm C 58 cm D 62 cm E 76 cm



Mr Lose

