Mrs Backhouse and Mrs Ireson's Set 1 Maths

Monday 20th July   **Sudoku**

The modern version of Sudoku was invented in 1979 by Howard Garns in USA (where it was called `Number Place'). It became really popular in Japan in the 1980s and in the UK since late 2004. It is now quickly spreading worldwide. The word Sudoku is an abbreviation of a phrase which means "the digits must occur only once".

The aim of a Sudoku puzzle is to fill in the grid so that each row, each column and each box contains all the numbers from 1 to 9. Usually the grid is 9 by 9, using the numbers from 1 to 9, but the easier grids are smaller, using numbers from 1 to 4 or 1 to 6. Simple eh! Of course not!

Sometimes it is easy but often it can be fiendishly difficult. But it's fun to learn strategies for yourself by just having a go!

There are several levels of difficulty for you to try:

1. Easy. A 4 by 4 grid to start off, leading to a 6 by 6 grid.

2. Medium. 9 by 9 grids, but with plenty of numbers already in place and some helpful clues.

3. Hard. The hard puzzles have less numbers already in place and require more strategies to be used.

Fill in the puzzle so that every row across, every column down and every 2 by 2 box contains the numbers 1 to 4.

Easier Puzzle 1

			3
			2
3			
4			

Fill in the puzzle so that every row across, every column down and every 3 by 3 box contains the numbers 1 to 9.

Medium Puzzle 1

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

Clues:
1. Seek a 2 in the centre block of squares
2. Finish the centre block of squares
3. Search for 2s everywhere

Fill in the puzzle so that every row across, every column down and every 3 by 3 box contains the numbers 1 to 9.
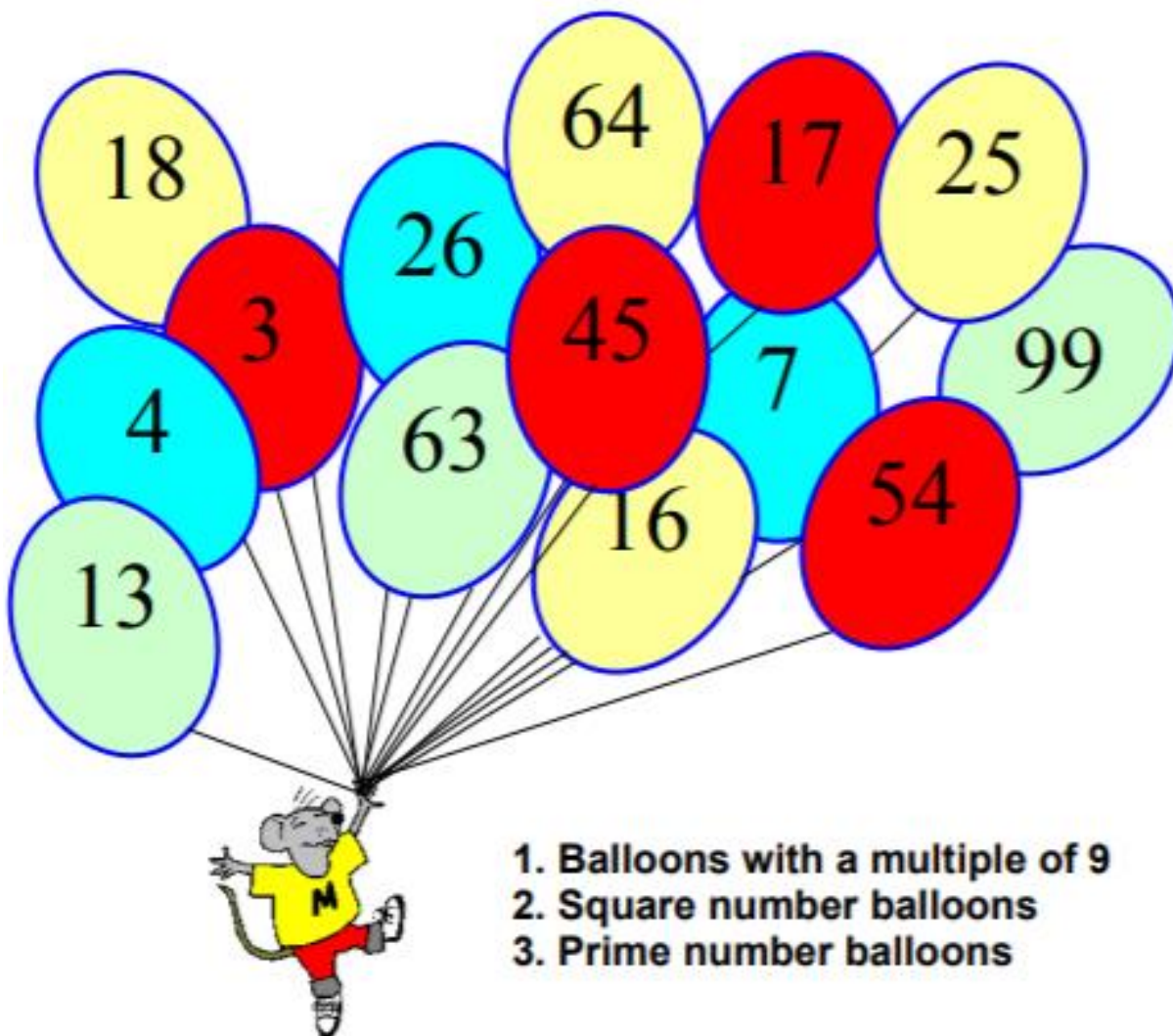
Hard Puzzle 1

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

Puzzle time

Balloon bursting

If a number in one of the balloons is included in the answers to the four problems below then that balloon will fly away.

64

18

17

25

26

3

45

7

99

4

63

16

54

13

1. Balloons with a multiple of 9
2. Square number balloons
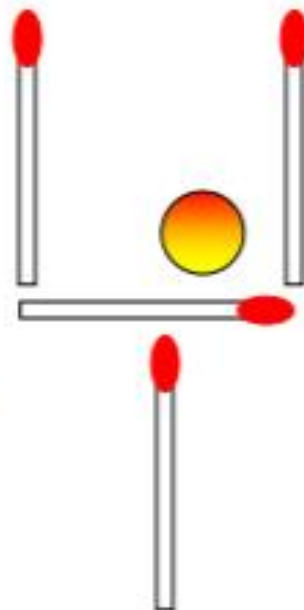3. Prime number balloons

WHICH BALLOON IS LEFT?

Matchstick puzzle 1

1. The cherry in the glass

4 matchsticks can be placed
as shown to make a wine glass.
A round cherry has been put
inside the glass.

Can you, by moving 2 matchsticks
only and not touching the cherry,
re-make the glass with the cherry
outside?

Anyone seen my
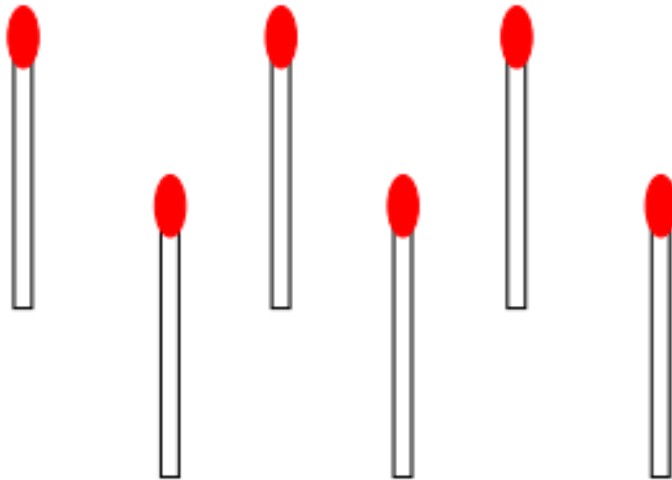cherry?

Matchstick puzzle 2

2. Six nil

Can you rearrange these six matchsticks so that they make nothing?

You can move as many of them as you like as often as you like!

I could just take them all away, I suppose... that would leave me with nothing!
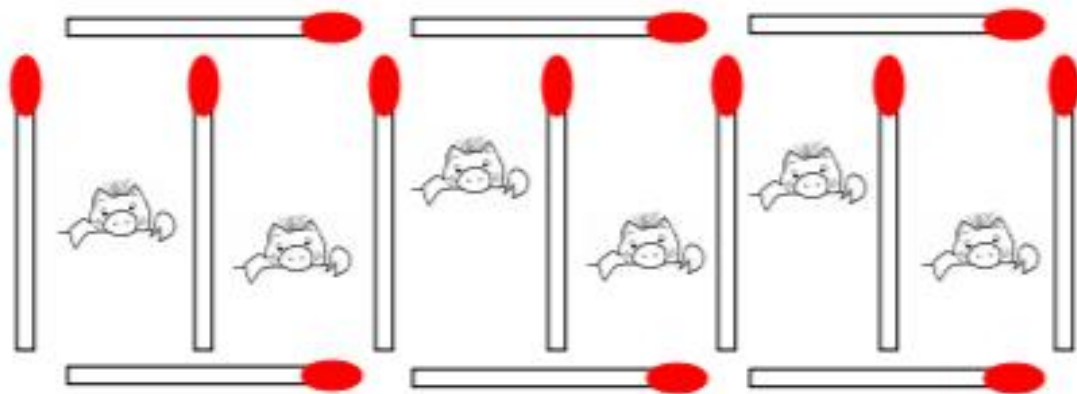
I wish my team would win six - nil!
If you want a little clue, think words rather than numbers!

Matchstick puzzle 3

3.Pens for pigs

Farmer Giles liked to give each of his six piggies a comfortable pen to sleep in.
He made his pens in the shape below, using 13 large pieces of fencing.
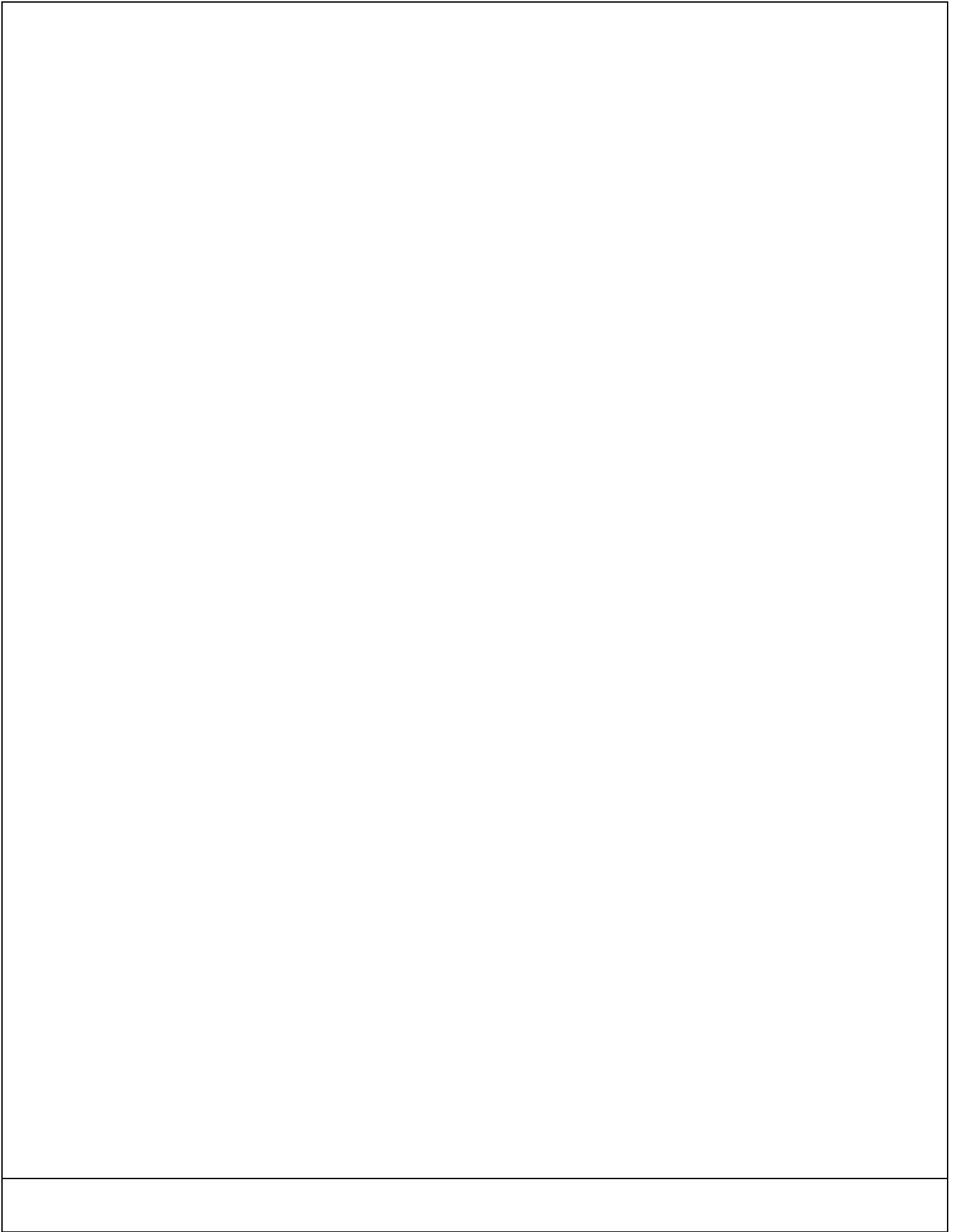
Unfortunately a gale blew one of the fences down and Father Giles had to rebuild his pig pen using only 12 pieces of fencing.

Can you use 12 matchsticks to make 6 equal sized pens?

(They don't have to be rectangles!)

Mr Gibbon's Set 3 Maths and Mr Lond's Set 2 Maths

Monday 20th July

Solve the maths puzzles below

Grid 1:

6	+		=	14
+		+		+
	+	9	=	16
=		=		=
13	+		=	

Grid 2:

20	−	12	=	
+		+		+
25	−		=	13
=		=		=
	−		=	

Star number grid:

6	8	11	13	16	18
	20	23	25		30
34	36		41	44	
76		81		86	
38					
					46

Fun Math Puzzle

9	+	3	=	
+		−		+
6	−		=	4
=		=		=
	+	1	=	16

Do the sum in the grid by filling in the missing numbers

How many
total squares
are there?

6 + 4 = 4
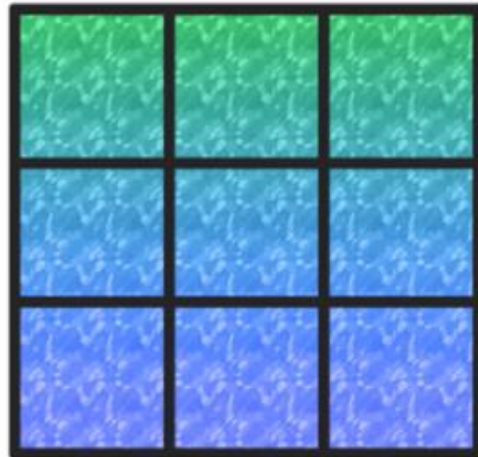
How can you make the equation true
by moving ONLY ONE matchstick?

Tuesday 21st July

Complete the Sudoku puzzles below buy putting the numbers 1-4 in each block. However, the number can only appear once in each row, column and box.
For example:

Completed example grid:

1	4	2	3
3	2	4	1
2	1	3	4
4	3	1	2

Puzzle 1:

3			2
	4	1	
	3	2	
4			1

Puzzle 2:

2	3	4	1
3	4	1	2

Puzzle 3:

	2		
	1	4	
		3	

Puzzle 4:

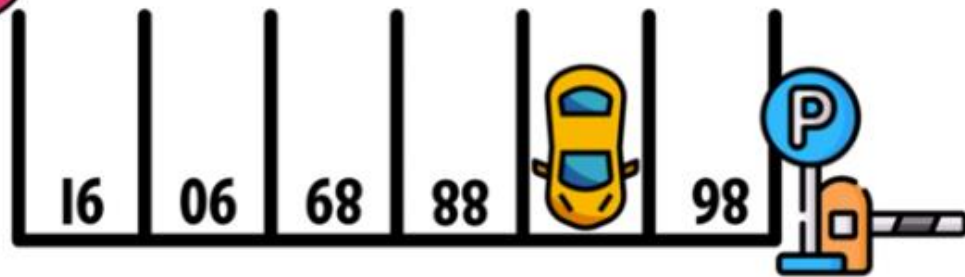| 3			
			2
4			1

If they are too easy, move onto the harder puzzles below. This time, you will need to use the numbers 1-6.

		3		1	
5	6		3	2	
	5	4	2		3
2		6	4	5	
	1	2		4	5
	4		1		

					3
	6		4	5	
				1	5
1	2				
	1	2		3	
6					

#8

16 | 06 | 68 | 88 | | 98

What is the number of the parking spot
occupied by the car in the diagram above?