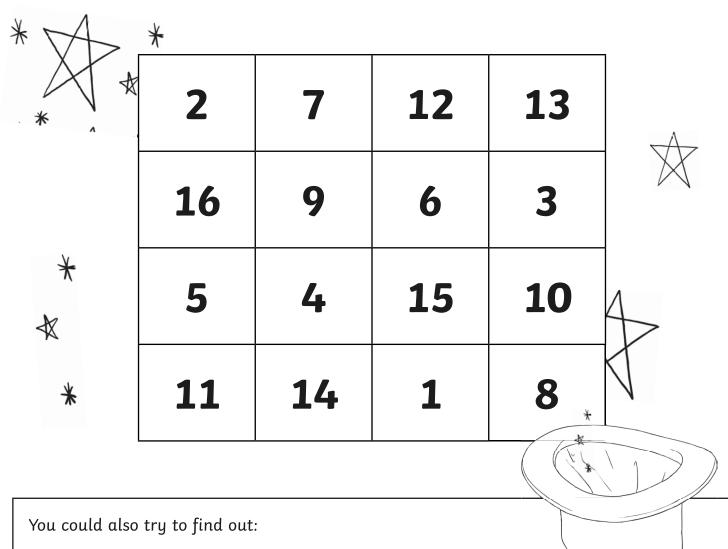# Magic Squares

Amazing Fact

In 2004, the Czech magician Zdenek Zahradka spent 10 days buried underground in a coffin without food or water. He survived by breathing through a ventilation pipe.

Challenge

Did you know that maths and numbers can also be magic?

Look at the magic square below. The total along any line, horizontal, vertical or diagonal is the same. The 'magic number' for this square is 34. Now complete the activity sheet provided.

2	7	12	13
16	9	6	3
5	4	15	10
11	14	1	8

You could also try to find out:

- which other tricks he has performed;
- what is the longest time anyone has survived without food or water;
- which similar tricks have been performed by other magicians;
- why people fast for long periods.

Magic Squares

Complete these magic squares.

Don't use the same number twice in a square and the numbers must add up to the same number in each row, column and diagonal line.

a)

8		9
	6	
3		4

b)

13	9	8
12		

c)

3		
10	5	
2		

d)

2	7	6
9		1
	3	

e)

	2	
	7	
4		5

f)

6		11
7		12

g)

9		
8		6
		5

h) Now make your own.

i) Now make your own.

Magic Squares **Answers**

a)

8	**1**	9
7	6	**5**
3	**11**	4

b)

13	9	8
5	**10**	**15**
12	**11**	**7**

c)

3	**4**	**8**
10	5	**0**
2	**6**	**7**

d)

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

e)

9	2	**10**
8	7	**6**
4	**12**	5

f)

6	**10**	11
14	**9**	**4**
7	**8**	12

g)

9	**2**	**10**
8	**7**	6
4	**12**	5

h) Answers will vary.

i) Answers will vary.