THE AMAZING SQUARE

www.insight.typepad.co.uk | Grahame Knox

THE AMAZING SQUARE

Prepare an OHP acetate, flipchart page or PowerPoint slide with a grid of four rows and four columns as in Table 1.

Explain that you are going to ask for a number between 50 and 100 and that you will place numbers in the square so that each row adds up to the number selected - vertically, diagonally, and horizontally.

In addition, the four corner numbers and the four centre squares will add up to the number selected at random by a member of the youth group.

Practice this illustration to perform it confidently and without reference to this page.

1. Ask a volunteer to shout out a number between 50 and 100.
2. Show the grid as in Table 1.
3. Then add the numbers 10, 11 and 12 in the positions as shown in Table 2.
4. You are now left with four cells to fill. Subtract 21 from the number chosen by the volunteer. For example, if the number is 70 you will have 49. Starting with this number add this and the next consecutive numbers into the squares marked ABC and D in Table 2.
5. You see in Table 3 the finished amazing square.
6. Ask the young people to confirm your claims that all the rows, columns, diagonals, four corners and four centre squares add up to the random number selected. In this case, 70. Your young people will be impressed!

TABLE 1			
	1		7
	8		2
5		3	
4		6	9

TABLE 2			
B	1	12	7
11	8	A	2
5	10	3	D
4	C	6	9

TABLE 3			
50	1	12	7
11	8	49	2
5	10	3	52
4	51	6	9