



# INVESTIGATION



## Patterns in Six Columns

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

# MathSphere

## Patterns in six columns

Write down this pattern of numbers:

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

You can continue it for as many rows as you like.

See how many patterns you can find in it.

Try going in patterns like two squares down and one square along. What happens?

Write down your discoveries carefully.

Don't forget to look for things like prime numbers.

## **Answer Guide**

Plenty of patterns here involving tables and other things.

Encourage children to move diagonally in both directions as well as down the columns.

All the prime numbers with the exception of 2 and 3 are found in the first and fifth columns - a surprising result. Some children should be able to work out why there are none in the second, third, fourth and sixth columns.