## Mystery Matrix

Have a look at this table square or matrix:

| $\mathbf{x}$ | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 4 | 6 | 8 | 10 |
| 6 | 12 | 18 | 24 | 30 |
| 7 | 14 | 21 | 28 | 35 |
| 9 | 18 | 27 | 36 | 45 |

Can you see how it has been constructed?
Why are some numbers in black and some in red?
Can you explain why the red 6 is in that particular square?
Why is there a 45 in the bottom right-hand corner?

You will notice that the numbers 2 to 9 are used to generate the matrix and only one of these numbers is used twice (the 2).

Can you fill in the matrix (table square) below?
The numbers 2 to 12 were used to generate it with, again, just one number used twice.


