Digital Roots

When you work out a multiplication calculation, you can find the digital root of the answer.

1) Find a multiplication sum you want to work out, e.g. **8 x 6**
2) Find the answer (you can use the times table square at the bottom of the page to help you): **8 x 6 = 48**
3) Look at the answer you have just worked out: **48**
4) Write down the digits in the answer: **4 and 8**
5) Add up those digits: **4 + 8 = 12**
6) Continue adding up the digits in each answer, until you have a single-digit answer: **1 + 2 = 3**
7) The single-digit answer is called the digital root: **3**

Your task is to work out the digital roots of as many of the times tables as you can. Start with the one times table, and when you have done this, look at the digital roots you have worked out. Can you find any patterns?

Next, move on to the two times table, and then continue until you have worked out digital roots for all times tables up to 12 x 12. Remember to look for patterns - make a quick note of these in your Maths book.

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144