Developing fluency with times tables
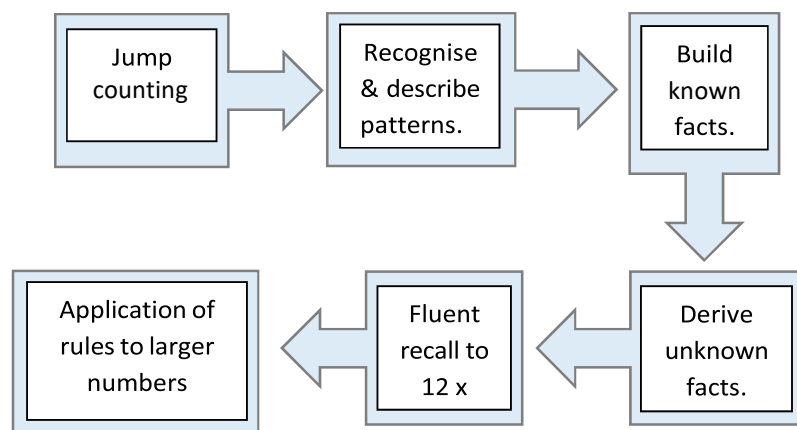
Don't practise until they get it right…practise until they can't get it wrong!

Jump counting → Recognise & describe patterns. → Build known facts. ↓ Derive unknown facts. ← Fluent recall to 12 x ← Application of rules to larger numbers

x	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

10 x	2 x	5 x	4 x	0 x	1 x
10 x Move one place value bigger and use zero as a place holder.	**2 x** Doubles, even numbers Partition, double and recombine for larger factors.	**5 x** The ones' value is 5 or 0. Multiply by ten and halve for larger factors.	**4 x** Double and double again.	**0 x** Anything multiplied by zero is zero.	**1 x** The other factor stays the same.
3 x and 6 x, All multiples of 3 have a digital root of 3, 6 or 9 e.g. 27 is a multiple of 3 because 2 + 7 is 9. Even multiples of 3 are also multiples of 6. **8 x** Double, double and double again to multiply large numbers by 8. **Or** Multiply by 10 and subtract 2 groups.	**9 x** Repeated addition pattern: add ten then subtract one. Multiply by ten then subtract one group. $9 \times 4 = 36$ The digital root is always 9. Learn the finger trick.	**11 x** Repeated addition: add a ten and a one. Multiply: multiply by ten then add one group.	**12 x or more** Partition and multiply then recombine.	It is helpful to learn some 'tricky' facts by heart using mnemonics. e.g. 8 and 8 are sick on the floor (8 x 8 = 64) 7 x 7 = 49, one short of 50 all the time 56 = 7 x 8 (consecutive numbers)	