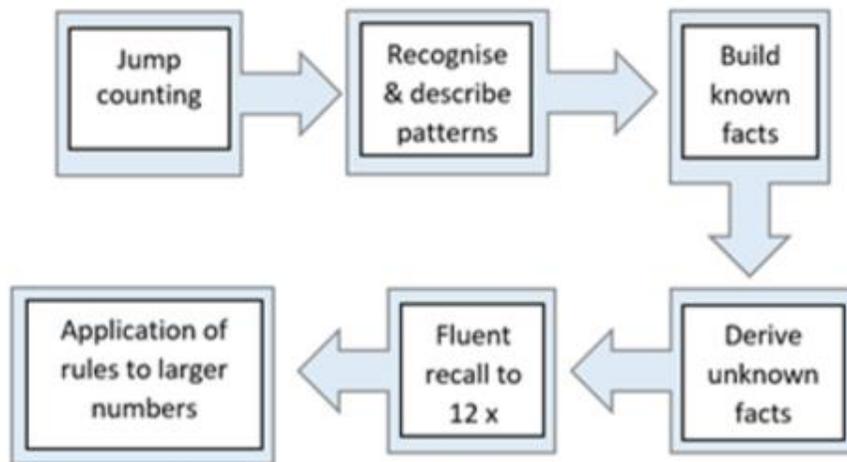


Developing Fluency with Times Tables



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

<p>10 x Move one place value bigger and use zero as a place holder</p>	<p>2 x Doubles, even numbers Partition, double and combine for larger factors</p>	<p>5 x The ones value is 5 or 0 Multiply by ten and halve for larger factors</p>	<p>4 x Double and double again.</p>	<p>0 x Anything multiplied by zero is zero.</p>	<p>1 x The other factor stays the same.</p>
<p>3 x and 6 x. All multiples of 3 have a digital root of 3, 6 or 9. Even multiples of 3 are also multiples of 6.</p>	<p>9 x Repeated addition pattern: Add ten then subtract one Multiply by ten then subtract one group. The digital root is always 9 – learn the finger trick</p>	<p>11 x Repeated addition: Add a ten and a one. Multiply: Multiply by ten then add one group.</p>	<p>12 x or more Partition and multiply then recombine.</p>	<p>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)</p>	
<p>8 x Double, double and double again to multiply large numbers by 8. Or Multiply by 10 and subtract 2 groups.</p>					