Multiplication facts learned in each year

Year 1	Year 2			Year 3			Year 4				
1×	10 ×	5×	2×	4×	8×	3×	6×	9×	7×	11×	12×
		half 10 ×		double 2 ×	double 4 ×		double 3 ×	$6 \times add 3 \times$		10 × add 1 ×	$10 \times add 2 \times$
1 × 1 = 1											
2 × 1 = 2	2 × 10 = 20	$2 \times 5 = 10$	2 × 2 = 4								
3 × 1 = 3	3 × 10 = 30	3 × 5 = 15	3 × 2 = 6	3 × 4 = 12	3 × 8 = 24	3 × 3 = 9					
4 × 1 = 4	4 × 10 = 40	4 × 5 = 20	4 × 2 = 8	4 × 4 = 16							
5 × 1 = 5	5 × 10 = 50	5 × 5 = 25									
6 × 1 = 6	6 × 10 = 60	6 × 5 = 30	6 × 2 = 12	6 × 4 = 24	6 × 8 = 48	6 × 3 = 18	6 × 6 = 36				
7 × 1 = 7	7 × 10 = 70	7 × 5 = 35	7 × 2 = 14	7 × 4 = 28	7 × 8 = 56	$7 \times 3 = 56$	7 × 6 = 42	7 × 9 = 63	$7 \times 7 = 49$		
8 × 1 = 8	8 × 10 = 80	8 × 5 = 40	8 × 2 = 16	8 × 4 = 32	8 × 8 = 64						
9 × 1 = 9	9 × 10 = 90	9 × 5 = 45	9 × 2 = 18	9 × 4 = 36	9 × 8 = 72	9 × 3 = 72	9 × 6 = 54	9 × 9 = 81			
10 × 1 = 10	10 × 10 = 100										
11 × 1 = 11	11 × 10 = 110	11 × 5 = 55	11 × 2 = 22	11 × 4 = 44	11 × 8 = 88	11 × 3 = 88	11 × 6 = 66	11 × 9 = 99	11 × 7 = 77	11 × 11 = 121	
12 × 1 = 12	12 × 10 = 120	12 × 5 = 60	12 × 2 = 24	12 × 4 = 48	12 × 8 = 96	12 × 3 = 96	12 × 6 = 72	12 × 9 = 108	12 × 7 = 84	12 × 11 = 132	12 × 12 = 144
12 facts	11 facts	10 facts	9 facts	8 facts	7 facts	6 facts	5 facts	4 facts	3 facts	2 facts	1 fact
12 facts in Y1	30 facts in Y2			21 facts in Y3			15 facts in Y4				

Children should learn (and remember) that multiplication is commutative in order for this approach to be successful.

For children to become fluent, they need to experience these facts in different representations and contexts, with variation in the structure of the calculation, for example $8 \times 2 = 16$ can also appear as $16 = 8 \times 2$, and they should also recall the related division fact for the multiplication, for example $8 \times 2 = 16$ so $16 \div 2 = 8$

With children being in school for 39 weeks of the year, the learning of these facts is manageable with the most facts being learned in Year 2, but this averaging out as less than 1 fact per week.