

# Mathematics



## Parents' Guide to Learning Times Tables

## **Times Tables Guidelines (Year Groups)**

Please note the importance of checking and practising the facts from previous years, as well as the tables to be learnt in that year group

<b><u>Year Group</u></b>	<b><u>Teaching and Learning</u></b>
<b><u>Reception</u></b>	Counting in 10s, 5s and 2s
<b><u>Year 1</u></b>	Number bonds to 10 and 20 10x and 2x tables
<b><u>Year 2</u></b>	2x and 5x tables
<b><u>Year 3</u></b>	3x, 4x and 8x tables
<b><u>Year 4</u></b>	6x, 7x, 9x, 11x and 12x tables
<b><u>Year 5</u></b>	All times tables up to 12x12 checked, practised and applied fluently, including combining with place value knowledge (e.g. $5600 = 70 \times 80$ )
<b><u>Year 6</u></b>	All times tables up to 12x12 checked, practised and applied fluently, to an increasingly wide array of contexts supporting depth of knowledge and speed of recall

### **Top Tips for helping your child learn their times tables**

1. Learn a little at a time. If you start a new times table, don't try and master it overnight. Start with a few facts (e.g.  $1 \times 5$ ,  $2 \times 5$ ), then add more in when they are used to it.
2. Constant revision of all the tables is important, as they are easy to forget when you move onto a new set.
3. Demonstrate using real objects so children can see (e.g. 3 lots of 4 as 3 rows of 4 matchsticks to 'see'  $3 \times 4 = 12$ ).
4. Use real life situations to develop understanding of times tables (e.g. If you save 5p every day, how much would you have saved in a week?)

### **Hints:**

It is very important that the children understand how the tables are compiled so that they can start to find their own tricks for fluency:

$$1 \times 5 = 5$$

This means there is 1 'lot of' 5

$$2 \times 5 = 10$$

This means that there are 2 'lots of 5' i.e. 5 plus another 5 ( $5 + 5 = 10$ )

$$3 \times 5 = 15$$

3 lots of 5

$$5 + 5 + 5 = 15$$

This knowledge is especially helpful for higher times tables. If a child does not know  $7 \times 7$ , they do not need to start at the beginning.

$$5 \times 7 = 35$$

$$6 \times 7 = 35 + 7 \text{ (5 lots of 7 plus one more 7 = 6 lots of 7) } = 42$$

$$7 \times 7 = 42 + 7 \text{ (7 lots of 7) } = 49$$

This is the 'Distributive Law of Multiplication' i.e.  $7 \times 7 = (5 \times 7) + (2 \times 7)$

### **Multiplication is Commutative:**

Commutative means that it doesn't matter which way around the numbers go, so  $2 \times 4$  is the same as  $4 \times 2$

This is the 'Commutative Law of Multiplication' i.e.  $2 \times 4 = 4 \times 2$

### **Use a variety of ways to practise:**

- Count forwards and backwards in 2's, 3's, 4's etc.
- Put one finger up every time you move onto the next number in the sequence, this may help the children to remember which number they are up to
- Chant the tables
- Working on one table at a time, but saying them out of order
- Give them the answer and they work out the question

### **Looking for patterns in the tables:**

<b>2x:</b> All even numbers and pattern repeats in the last digit.	2, 4, 6, 8, 10, 12, 14, 16, 18
<b>3x:</b> The numbers follow the pattern of odd, even, odd, even, odd –	3, 6, 9, 12, 15, 18.
<b>4x:</b> All of these are double the two times table facts All of the 4x tables are in the 2x tables	2 <b>4</b> 6 <b>8</b> 10 <b>12</b> 14 <b>16</b> 18 <b>20</b> (2x table) <b>4 8 12 16 20</b> (4x table)
<b>5x:</b> Any odd number times 5 ends in a 5. Any even number times 5 ends in a 0.	3x5=1 <u>5</u> ; 5x5=2 <u>5</u> ; 7x5=3 <u>5</u> 2x5=1 <u>0</u> ; 4x5=2 <u>0</u> ; 6x5=3 <u>0</u>
<b>6x:</b> These numbers are double those in the three times table All of the 6x tables are in the 3x tables	3 <b>6</b> 9 <b>12</b> 15 <b>18</b> 21 <b>24</b> 27 <b>30</b> (3x table) <b>6 12 18 24 30</b> (6x table)
<b>8x:</b> These answers are all double those in the four times table All of the 8x tables are in the 4x tables	4 <b>8</b> 12 <b>16</b> 20 <b>24</b> 28 <b>32</b> (4x table) <b>8 16 24 32</b> (8x table)
<b>9x:</b> All the digits add up to 9	9 x 4 = 36 ( 3 + 6 = 9 )
<b>10x:</b> All numbers end in zero.	10 20 30 40 50
<b>11x:</b> Both digits are the same (for answers up to 100)	11 22 33 44 55
<b>12x:</b> If you have learnt all the other tables, there should only be one fact to learn 12 x 12	12 x 12 = 144

### Multiplication Grid:

×	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