

# Parents Guide to Learning Times Tables



Updated 2019/20

## Times Tables Guidelines



Children will be learning their tables in class as follows (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):

Year Group	Teaching and Learning	Focus for checking and practice
Reception	Counting in 10, 5 and 2s	Counting in 1s
Year 1	Number Bonds to 10 and 20  10 and 2 times tables	Counting in 10, 5 and 2s
Year 2	2 and 5	Number Bonds to 10 & 20  10 times tables
Year 3	3,4 and 8	10, 2 and 5
Year 4	6, 7, 9, 11 and 12	3,4 and 8
Year 5	All times tables to 12 x 12 checked, practised thoroughly and applied, including combining with place value knowledge (e.g. $5600 = 70 \times 80$ )	
Year 6	All times tables to 12 x 12 checked, practised thoroughly and applied to an increasingly wide array of contexts supporting depth of knowledge and speed of recall (e.g. $\frac{1}{7}$ of 560 = 80, Area of a rectangle $0.7 \times 8.0\text{m} = 5.6\text{m}^2$ ).	

## 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 3p every day, how much do you think you would 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'*

$$\text{i.e. } 7 \times 7 = (5 \times 7) + (2 \times 7)$$

## Multiplication is Commutative



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

$$2 \times 4 = 4 \times 2$$



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

You could also look at chocolate bars and look at the times table fact they show.



## Use mnemonics to aid the memory



*'I ate and ate till I was sick on the floor: 8 times 8 is 64!'*

*'Wakey, wakey, rise and shine: seven 7's are 49.'*

Try and make up some of your own.

## Talk the tables

- 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

2 x : All even numbers and pattern repeats in the last digit.

2, 4, 6, 8, 10, 12, 14, 16, 18

3x : The numbers follow the pattern of odd, even, odd, even, odd -

3, 6, 9, 12, 15, 18.

4x : All of these are double the two times table facts

2   4   6   8   10   2x table

4   8   12   16   20   4x table

5x : Any odd number times 5 ends in a 5. Any even number times 5 ends in a 0.

6x : These numbers are double those in the three times table

3   6   9   12   15   3 x table

6   12   18   24   30   6 x table

8x : These answers are all double those in the four times table

4	8	12	16	4 x table
8	16	24	32	8 x table

9 x : All the digits add up to 9. This even works for really high multiples of 9, but you need to keep going until there is only one digit (called the 'digital root')

$$9 \times 4 = 36 \quad 3 + 6 = 9$$

$$9 \times 19 = 171 \quad 1 + 7 + 1 = 9$$

10x : All numbers end in zero.

11x : Both digits are the same (for answers up to 100)

12x : If you have learnt all the other tables, there should only be one fact to learn  $12 \times 12$ .

## Multiplication Square



This can be coloured in as each times table is learnt.

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

## Games



### Cards -

- Cut up some paper or card and make a quick set of cards for the times table (or just the trickier facts) that you need to practise
- Write the 'question' (e.g.  $6 \times 7$ , or  $42 \div 6$ , or  $42 \div 7$ ) on the front and the 'answer' on the back
- Play games - for example 'Who can answer first and win the most cards?' 'How many can you do in 30 seconds?' '10 Seconds?' 'Hide and seek the fact cards'

### Bingo -

- Each player selects five answers from one of the times tables
- Roll two die, add the dots together
- Multiply that total by whichever table it is you are doing
- Then cross out that number if you have it

### Rock, paper, scissors-

- Two players stand facing each other with hands behind their backs
- They say rock, paper, scissors (or similar) and show some fingers
- The players need to multiply the number of fingers with those of their partners
- The first to say the answer wins a point and play continues

### Times tables Table Tennis-

- Each player holds an imaginary table tennis bat, one player starts with the first number in the times tables that they are learning
- Players try to build a rally by 'batting' the next number in the times table back to their partner

### Ball games

- Throw n catch/ kick pass a ball whilst asking and answering times tables questions