

Supporting Your Child  
With Learning the  
Times Tables.



Dear Parent/Carer,

This booklet has been created to help you support your child when learning their times tables.

The New Primary Curriculum requirements for learning times tables are as follows:

- **Year 1** counting on and back from 0 in 2s, 5s and 10s.
- **Year 2** Recall and use multiplication and division facts for 2, 5 and 10.
- **Year 3** Recall and use multiplication and division facts for 3, 4 and 8.
- **Year 4** Recall all the multiplication and division facts up to 12.
- **Year 5 & Year 6** Confidently apply this knowledge to problems considering decimals and multiples of number too.

Multiplication tables are just a quick way of doing an addition sum. It is very important that the children understand how the tables are compiled: this will make their learning easier as then they will not be just learning by rote.

$$1 \times 5 = 5$$

This means there is 1 'lot of' 5

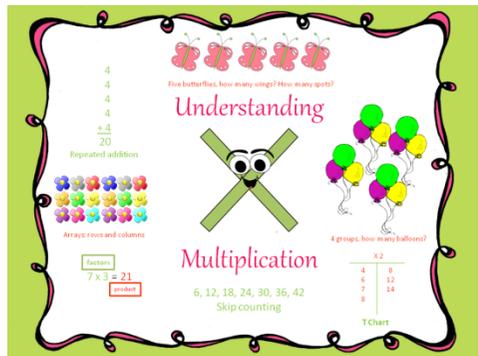
$$2 \times 5 = 10$$

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

$$5 + 5 + 5 = 15 \text{ etc.}$$



Children learn **in different ways**. Therefore some of the tips below will help your child more than others. Pick and choose from this selection: what works for one child will not necessarily work for a sibling.

Learn only **a little at a time**. If you are starting on a new table don't attempt to master the whole thing at once; start with  $1 \times 6$ ,  $2 \times 6$  on one day, then add further numbers in the sequence when they are ready for it.

**Constant revision** of all of the tables is important; not just those learned recently.

**Demonstrate** Using concrete apparatus so that children can see, for example,  $3 \times 4$  is 3 lots of 4 so show as 3 rows of 4 sweets, pencils, buttons etc.

Sweets can be good for demonstrations, as the anticipation of getting a reward can make the lesson much more memorable!

**Apply to real life situations:**

"If there are four legs on every chair, how many legs are there altogether on the 6 chairs around the table?"

"If we order three pints of milk from the milkman every day, how much milk do we drink in a week?"

**Look for number patterns in the tables**

There is no 'right' way to learn the times tables, and it helps to know lots of tricks, 'cheats' and links between times table facts. The next few pages will help you to identify some ways of making the times tables more fun and relevant than just rote learning.

0x: Think of 'empty pockets'. Ask your child how many pockets he has in the clothes he is wearing at the moment. If there are three pockets, all with nothing in them, then he has nothing. It doesn't matter how many pockets he has, if they are all empty, there will be nothing.  $3 \times 0 = 0$  etc.

2x: You will be doubling the number so all numbers will be even. 0 2 4 6 8 10 then the pattern is repeated with the last digit in each answer 12 14 16 18 20 22 24...

3x: The numbers follow the pattern odd, even, odd, even i.e. 3 6 9 12 15. When you add the digits together if they make a multiple of 3 it is a multiple of 3 e.g.  $315 = 3+1+5=9$ .

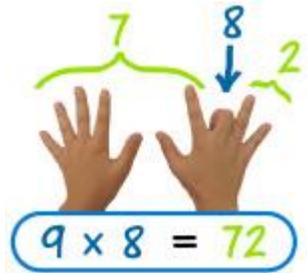
4x: All of these are double the answers in the 2x table. Any number where the last 2 digits are a multiple of 4 will be a multiple of 4.

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

6x: These answers are just double those in the 3x table.

8x: These are just double those in the 4x table.

9x: Hold both hands up in front of you with your palms facing you. Whatever you're multiplying by (say 8) bend down that finger. (The 8<sup>th</sup> from left to right)



The fingers to the left of the bent finger are the tens (7) and to the right the units (2).

The answer to  $9 \times 8$  is there 72.

The numbers will be a multiple of 9 if the total of the digits add up to 9 e.g.  $153 = 1+5+3=9$  or  $99 = 9+9=18$  then  $1+8=9$ .

**Here is another trick:**

Multiplying by 9 is really multiplying by 10 and taking away the amount being  $\times$  by 9.

e.g.  $10 \times 8 = 80$  therefore  $9 \times 8 = 80 - 8$

11x: Both digits are the same (for answers <100). Also it is 10x add another 1.

12x: If you've learnt all the other tables - there actually should only be one thing to learn by this stage:  $12 \times 12 + 144$ . Also it is  $\times 10$  add  $\times 2$ .

## Using a times table square

x	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

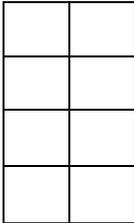
As the tables are learnt, they can be coloured or highlighted both horizontally and vertically. You can use this opportunity again to emphasise that  $3 \times 6 = 6 \times 3$  so therefore as well as learning all of the  $3 \times$  table, part of the  $6 \times$  table has also been learned so this can be coloured in as well! Therefore, by the time all the tables up to and including  $5 \times$  have been learnt, there are actually only one quarter of this grid left to commit to memory.

## Multiplication is Commutative

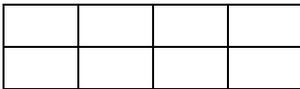
(Commutative means that it doesn't matter which way around the numbers go, so  $3 \times 4$  is the same as  $4 \times 3$ )

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

This can be demonstrated very easily by drawing a rectangle 4 squares by 2:



And also 2 squares by 4:



## Use mnemonics to aid memory

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

Wakey, wakey rise and shine: seven 7s are 49!

Make up some of your own!

## **Home-made Mathematical Games**

The following games can be adapted for the times tables and any other uses you can think of:

- Buy a set of blank business cards from any good stationer.
- Snip one corner of each card so that you can tell which way up they should be when the cards are face down.
- Write a variety of times tables questions and answers on separate cards just one thing on each card: For example write  $3 \times 5 = -$  on one card and 15 on another card etc.

These can be then used to play:

- Snap
- Pairs/ Pelmanism

### **Pelmanism/Pairs**

You will to label the back of the cards as 'questions' or 'answers'. Shuffle the cards and

arrange them in a neat order on the table, face down. The players take it in turn to reverse any two cards; the cards must be left on the table face upwards so that everybody gets a good chance to look at them. If the two cards are equivalent the player gets to keep the pair and has another go. If the two cards are not a pair they are turned over once more and left on the table. The game continues until all the cards have been claimed.

### Snap

Again, half of the cards should be the 'question' (2 x 5) and the other half of the cards should contain the 'answer'(10). Shuffle the cards and divide them equally between two players. One has the 'question' cards and one has the 'answer' cards. The players keep their cards in a pile, face down. Both players turn their cards over at the same time and place beside each other on the table. If the cards are equivalent, the first person to shout snap is the winner. Shuffle again and start a new game.

## **Beat the Clock**

How many times tables can you answer in 30 seconds or 1 minute. Can you beat your score?

## **Dice Games**

Roll one or two dice pick a times table and multiply it by the results on the dice.

## **Times Tables Rock Stars**

### **Websites:**

[www.learn-timestables.com](http://www.learn-timestables.com)

<http://www.multiplication.com/games/play/cave-run-multiplication>

<http://resources-woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm>

<http://www.topmarks.co.uk/maths-games/7-11-years/times-tables>

<http://www.maths-games.org/times-tables-games.html>

[http://www.mad4maths.com/multiplication\\_table\\_math\\_games/](http://www.mad4maths.com/multiplication_table_math_games/)

<http://www.bbc.co.uk/skillswise/game/ma13table-game-tables-grid-find>

<http://www.waht2learn.com/home/examgames/maths/subtraction/>

<http://www.echalk.co.uk/tasters/taster3/taster.html>

<http://www.ictgames.com.spitfireufo.html>

<http://www.primaryhomeworkhelp.co.uk/maths/timestable/>