

### Times Tables Games and Strategies

We often get asked at parents' evening what can be done to help children at home with their maths – learning times tables is a brilliant way of helping your child and it really can make a huge difference. Knowing their times tables opens so many mathematical doors for children. If children don't know them, maths can become arduous and tricky.

The aim of this booklet is to show you some strategies we use in school and that you could try at home to help children with their tables.

We hope you find it useful.

### **Learning Tables**

### What the National Curriculum says...

In the table below are the National Curriculum times tables expectations for each year group.

Ex	spectations for times tables for each year group
Year 1	Count in multiples of 2, 5 and 10. Recall and use all doubles
	to 10 and corresponding halves.
Year 2	Recall and use multiplication and division facts for the 2, 5
	and 10 times tables including recognising odd and even
	numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4
	and 8 times tables
Year 4	Recall and use multiplication and division facts for tables up
	to 12 x 12
Year 5	Revision of all times tables and division facts up to 12 x 12
Year 6	Revision of all times tables and division facts up to 12 x 12

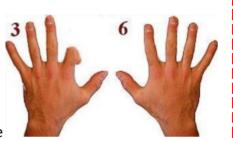
### **Useful Tips**

- Focus on one table at a time to minimise confusion.
- Start with chanting and writing them out slowly in order.
- Then move on to completing the answers quickly in order on paper or verbally with your child.
- Move on to completing the answers in any order (this could be on a multiplication square).
- Keep reminding your child that 3 x 4 is the same as 4 x 3 this is effectively halves the number of tables facts.
- Each table has a square number 3 x 3, 7 x 7 etc. These are special numbers that can act as a memory hook emphasise them!
- Talk about the numbers as you are encountering them "5 x 7 = 35 that's our house number" this makes more memory hooks.

### **Tricks and Games**

### 9 x table on your fingers

- 1. Hold your hands in front of you with your fingers spread out.
- 2. For 9 x 4 bend your 4<sup>th</sup> finger down (like the picture).
- 3. You have 3 fingers in front of the bent finger and 6 after the bent finger. Thus the answer must be 36!
- 4. The technique works for the 9 times tables up to 10.



### Super Fingers!

This is a game for two players.

The game is basically a version of rock, paper, scissors but with numbers. Two players count to 3 and then make a number using their fingers.

Both players then have to multiply both numbers together and the quickest wins.

### **Multiplication Snap!**

You will need a deck of cards for this game.

- **1.** Flip over the cards as though you are playing snap.
- 2. The first to say the fact based on the cards turned over (2 and 3 say 6) gets the card.
- **3.** The person to get all of the cards wins.

### **Rhyme Time!**

Silly rhymes can help children learn tricky tables, e.g.,

8 x 8 = 64 'He ate and ate and was sick on the floor, eight times eight is 64.'

3 x 3 = 9 'Swing from tree to tree on a vine, three times three is nine.'

 $7 \times 7 = 49$  'Seven times seven is like a rhyme, it all adds up to 49.'

4 x 4 = 16 'A 4 by 4 is a mean machine. I'm going to get one when I am 16.'

### One Less = Nine

This is a strategy for learning the 9 x tables. The key to it is that for any answer in the nine times tables, both digits add up to 9. Try it and see!

- 1. Subtract 1 from the number you are multiplying by. E.g. 7 x 9 one less than 7 is 6.
  - 2. This number becomes the first number in the answer, 7 x 9 = 6\_
- 3. The two numbers in the answer add up to 9 so the second number must be  $3, 7 \times 9 = 63$

### Bingo!

This game will need 2 players.

Make a grid of six squares on a piece of paper and ask your child to write a number in each square from their target tables. Give them a question and if they have the answer they mark the answer off. First one to mark off all their numbers is the winner!



### **Looking for Patterns**

Being able to spot the patterns in numbers is an important skill and can also help with learning times tables. Children can investigate these multiplication rules;

- Odd number x odd number = odd number (3 x 5 = 15)
- Even number x even number = even number (4 x 6 = 24)
- Odd number x even number = even number (3 x 6 = 18)

### **Speed Tables!**

Time challenges can be a really good way of helping times tables become automatic. Some ideas we use in school are;

-measuring the time it takes to write the tables, then trying to beat the time.

-seeing how many times you can write that table in 1 minute.

-race/challenge against other people

### Websites

### www.topmarks.co.uk

-Hit the Button

-Coconut Multiples

-Maths Fishing

-Times Tables Grid

### www.timetables.co.uk

- -Times Tables Shooting
- -Times Tables Memory
  - -Spuq Balloons
  - -Times Tables Rally

www.youtube.com

-Mr.DeMaio

### **Tricky Sixes**

Six times tables can be tricky to learn.
One helpful trick is that in the 6 times tables, when you multiply an even number by 6, they both end in the same digit.

$$2 \times 6 = 12$$

$$\frac{4}{9} \times 6 = 24$$

$$6 \times 6 = 36$$

$$8 \times 6 = 48$$

### Double, Double!

A quick trick for learning the fours is just to double, double. Double the number and then double it again.

For example;

3 x 4 double 3 is 6, double 6 is 12

5 x 4 double 5 is 10, double 10 is 20

6 x 4 double 6 is 12, double 12 is 24

9 x 4 double 9 is 18, double 18 is 36

12 X 12 Multiplication Table													
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

## 1 Times Table 1 x 1 = 1 2 x 1 = 2 3 x 1 = 3 4 x 1 = 1 5 x 1 = 5 6 x 1 = 6 7 x 1 = 7 8 x 1 = 8 9 x 1 = 9 10 x 1 = 10 11 x 1 = 11 12 x 1 = 12

# 2 Times Table 4 x 2 = 2 2 x 2 = 4 3 x 2 = 6 4 x 2 = 8 5 x 2 = 40 6 x 2 = 12 7 x 2 = 14 8 x 2 = 16 9 x 2 = 18 10 x 2 = 20 11 x 2 = 22 12 x 2 = 24

3 Times Table
$4 \times 3 = 3$
$2 \times 3 = 6$
$3 \times 3 = 9$
$4 \times 3 = 12$
5 x 3 = 15
$6 \times 3 = 18$
7 x 3 = 21
$8 \times 3 = 24$
9 x 3 = 27
10 x 3 = 30
11 x 3 = 33
12 x 3 = 36

4 Times Table
$1 \times 4 = 4$
2 x 4 = 8
3 x 4 = 12
4 x 4 = 16
5 x 4 = 20
6 x 4 = 24
7 x 4 = 28
8 x 4 = 32
9 x 4 = 36
10 x 4 = 40
11 x 4 = 44
12 x 4 = 48

5 Times Table
$1 \times 5 = 5$
$2 \times 5 = 10$
$3 \times 5 = 15$
$4 \times 5 = 20$
5 x 5 = 25
$6 \times 5 = 30$
7 x 5 = 35
$8 \times 5 = 40$
$9 \times 5 = 45$
10 x 5 = 50
11 x 5 = 55
12 x 5 = 60

s Table	6 Times Table
5 = 5	1 x 6 = 6
i = 10	2 x 6 = 12
i = 15	3 x 6 = 18
i = 20	4 x 6 = 24
= 25	5 x 6 = 30
i = 30	6 x 6 = 36
= 35	7 x 6 = 42
i = 40	8 x 6 = 48
= 45	9 x 6 = 54
5 = 50	10 x 6 = 60
5 = 55	11 x 6 = 66
5 = 60	12 x 6 = 72

7 Times Table
$1 \times 7 = 7$
2 x 7 = 14
$3 \times 7 = 21$
4 x 7 = 28
5 x 7 = 35
$6 \times 7 = 42$
7 x 7 = 49
8 x 7 = 56
9 x 7 = 63
10 x 7 = 70
11x 7 = 77
12x 7 = 84

8 Times Table
1 x 4 = 8
2 x 8 = 16
$3 \times 8 = 24$
4 x 8 = 32
5 x 8 = 40
6 x 8 = 48
7 x 8 = 56
8 x 8 = 64
9 x 8 = 72
10 x 8 = 80
11 x 8 = 88
12 x 8 = 96

9 Times Table
1 x 9 = 9
2 x 9 = 18
3 x 9 = 27
4 x 9 = 36
5 x 9 = 45
6 x 9 = 54
7 x 9 = 63
8 x 9 = 72
$9 \times 9 = 81$
$10 \times 9 = 90$
11 x 9 = 99
12x 9 = 108

10 Times Table
1 x 10 = 10
2 x 10 = 20
3 x 10 = 30
4 x 10 = 40
5 x 10 = 50
6 x 10 = 60
7 x 10 = 70
8 x 10 = 80
9 x 10 = 90
10 x 10 = 100
11 x 10 = 110
12 x 10 = 120

11 Times Table
1 x 11 = 11
2 x 11 = 22
3 x 11 = 33
4 x 11 = 44
5 x 11 = 55
6 x 11 = 66
7 x 11 = 77
8 x 11 = 88
9 x 11 = 99
10 x 11 = 110
11 x 11 = 121
12 x 11 = 132

12 Times Table
1 x 12 = 12
2 x 12 = 24
3 x 12 = 36
4 x 12 = 48
5 x 12 = 60
6 x 12 = 72
7 x 12 = 84
8 x 12 = 896
9 x 12 = 108
10 x 12 = 120
11 x 12 = 132
12 x 12 = 144