## 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.

| Expectations for times tables for each year group |  |
| :---: | :---: |
| Year 1 | Count in multiples of 2, 5 and 10. Recall and use all doubles <br> to 10 and corresponding halves. |
| Year 2 | Recall and use multiplication and division facts for the 2,5 <br> and 10 times tables including recognising odd and even <br> numbers. |
| Year 3 | Recall and use multiplication and division facts for the 3, 4 <br> and 8 times tables |
| Year 4 | Recall and use multiplication and division facts for tables up |
| to $12 \times 12$ |  |

## 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 $3 \times 4$ is the same as $4 \times 3$ - this is effectively halves the number of tables facts.
- Each table has a square number $3 \times 3,7 \times 7$ etc. These are special numbers that can act as a memory hook - emphasise them!
- Talk about the numbers as you are encountering them " $5 \times 7=35$ that's our house number" - this makes more memory hooks.


## Tricks and Games

## 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.

Silly rhymes can help children learn tricky tables, e.g.,
$8 \times 8=64$ 'He ate and ate and was sick on the floor, eight times eight is 64.'
$3 \times 3=9 \quad$ 'Swing from tree to tree on a vine, three times three is nine.'
$7 \times 7=49 \quad$ 'Seven times seven is like a rhyme, it all adds up to 49.'
$4 \times 4=16 \quad$ 'A 4 by 4 is a mean machine. I'm going to get one when I am 16.'


## 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 $(3 \times 5=15)$
- Even number $x$ even number $=$ even number $(4 \times 6=24)$
- Odd number $x$ even number $=$ even number $(3 \times 6=18)$



## $12 \times 12$ Multiplication Table

| $\times$ | 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 |
| :---: |
| $1 \times 1=1$ |
| $2 \times 1=2$ |
| $3 \times 1=3$ |
| $4 \times 1=1$ |
| $5 \times 1=5$ |
| $6 \times 1=6$ |
| $7 \times 1=7$ |
| $8 \times 1=8$ |
| $9 \times 1=9$ |
| $10 \times 1=10$ |
| $11 \times 1=11$ |
| $12 \times 1=12$ |


| 2 Times Table |
| :---: |
| $4 \times 2=2$ |
| $2 \times 2=4$ |
| $3 \times 2=6$ |
| $4 \times 2=8$ |
| $5 \times 2=40$ |
| $6 \times 2=12$ |
| $7 \times 2=14$ |
| $8 \times 2=16$ |
| $9 \times 2=18$ |
| $10 \times 2=20$ |
| $11 \times 2=22$ |
| $12 \times 2=24$ |


| 3 Times Table | 4 Times Table |
| :---: | :---: |
| $4 \times 3=3$ | $1 \times 4=4$ |
| $2 \times 3=6$ | $2 \times 4=8$ |
| $3 \times 3=9$ | $3 \times 4=12$ |
| $4 \times 3=12$ | $4 \times 4=16$ |
| $5 \times 3=15$ | $5 \times 4=20$ |
| $6 \times 3=18$ | $6 \times 4=24$ |
| $7 \times 3=21$ | $7 \times 4=28$ |
| $8 \times 3=24$ | $8 \times 4=32$ |
| $9 \times 3=27$ | $9 \times 4=36$ |
| $10 \times 3=30$ | $10 \times 4=40$ |
| $11 \times 3=33$ | $11 \times 4=44$ |
| $12 \times 3=36$ | $12 \times 4=48$ |


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

6 Times Table
$1 \times 6=6$
$2 \times 6=12$
$3 \times 6=18$
$4 \times 6=24$
$5 \times 6=30$
$6 \times 6=36$
$7 \times 6=42$
$8 \times 6=48$
$9 \times 6=54$
$10 \times 6=60$
$11 \times 6=66$
$12 \times 6=72$

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


| 9 Times Table | 10 Times Table |
| :---: | :---: |
| $1 \times 9=9$ | $1 \times 10=10$ |
| $2 \times 9=18$ | $2 \times 10=20$ |
| $3 \times 9=27$ | $3 \times 10=30$ |
| $4 \times 9=36$ | $4 \times 10=40$ |
| $5 \times 9=45$ | $5 \times 10=50$ |
| $6 \times 9=54$ | $6 \times 10=60$ |
| $7 \times 9=63$ | $7 \times 10=70$ |
| $8 \times 9=72$ | $8 \times 10=80$ |
| $9 \times 9=81$ | $9 \times 10=90$ |
| $10 \times 9=90$ | $10 \times 10=100$ |
| $11 \times 9=99$ | $11 \times 10=110$ |
| 12x $9=108$ | $12 \times 10=120$ |


| 11 Times Table | 12 Times Table |
| :---: | :---: |
| $1 \times 11=11$ | $1 \times 12=12$ |
| $2 \times 11=22$ | $2 \times 12=24$ |
| $3 \times 11=33$ | $3 \times 12=36$ |
| $4 \times 11=44$ | $4 \times 12=48$ |
| $5 \times 11=55$ | $5 \times 12=60$ |
| $6 \times 11=66$ | $6 \times 12=72$ |
| $7 \times 11=77$ | $7 \times 12=84$ |
| $8 \times 11=88$ | $8 \times 12=896$ |
| $9 \times 11=99$ | $9 \times 12=108$ |
| $10 \times 11=110$ | $10 \times 12=120$ |
| $11 \times 11=121$ | $11 \times 12=132$ |
| $12 \times 11=132$ | $12 \times 12=144$ |

