

# Year 4 Times Table Games and Strategies Workshop



The aim of this booklet is to show you some games and activities that are designed to help you support your child with the learning of their times tables.

## National Curriculum:

The Year 4 National Curriculum states that by the end of Year 4 'Pupils should be taught to recall multiplication and division facts for multiplication tables up to  $12 \times 12$ '.

## MTC Test— Summer Term 2022 for current Year 4 pupils

⇒ 25 questions, 6 seconds per question

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

## **TIMES TABLE TRICKS AND TIPS**

### Times table square

Using a times table square is a good way to help visualise all the answers and see the different patterns that occur. In the example below, all the square number answers have been coloured in.

You could create a new times table square for each table and see what patterns are created!

You could look for patterns, such as how the digits change in the 9 times table.

|    | 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 |

### Looking for patterns

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

**Odd number x odd number = odd number (E.g.  $3 \times 5 = 15$ )**

**Even number x even number = even number (E.g.  $4 \times 6 = 24$ )**

**Odd number x even number = even number (E.g.  $3 \times 6 = 18$ )**

### Flash cards/Post-Its

Once children know the times table facts in order, they can use flash cards to practise the facts out of order. They could just use them to answer questions, or for an extra challenge try it against the clock!

Flash cards/Post-Its could also be stuck around the house to help children learn the facts – we are sure they'll remember one stuck to the bathroom mirror!

## **TIMES TABLE TRICKS AND TIPS**

### 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.

$$\underline{2} \times 6 = \underline{12}$$

$$\underline{4} \times 6 = \underline{24}$$

$$\underline{6} \times 6 = \underline{36}$$

$$\underline{8} \times 6 = \underline{48}$$

### Double, Double

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

For example;

$3 \times 4$  double 3 is 6, double 6 is 12

$5 \times 4$  double 5 is 10, double 10 is 20

$6 \times 4$  double 6 is 12, double 12 is 24

$9 \times 4$  double 9 is 18, double 18 is 36

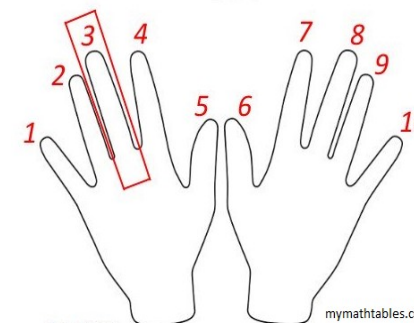
### 9 x table on your fingers

- 1) Hold your hands out in front of you with your fingers spread out.
- 2) For  $9 \times 3$ , bend your third finger down.
- 3) The fingers that remain up, and are before the bent finger, represent the tens. You have two fingers up = 2 tens = 20.
- 3) The 7 fingers still up to the right of the bent finger represent the ones—7 ones = 7
- 4) Therefore  $9 \times 3 = 20 + 7 = 27$

This trick works only for the 9 x table up to

10 times 9. Therefore, the children only really need to learn  $11 \times 9$  and  $12 \times 9$ !

(The children have been taught this in class so if you are unsure, ask them!)



## **TIMES TABLE GAMES**

### **Rhyme Time**

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

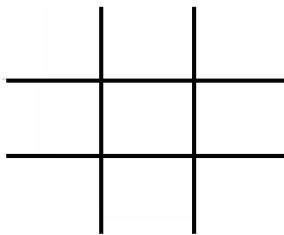
$8 \times 8 = 64$  - *He ate and he ate and was sick on the floor, eight times eight is sixty-four.*

$3 \times 3 = 9$  - *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 forty-nine.*

### **BINGO!**

Make a grid of six squares on a piece of paper (similar to noughts and crosses). Choose a times table e.g. 8 x table. Let the child look at a times table poster to gather the answers they are going to use to fill in the grid. Once the child has put the answers in the grid, hide the poster. Give the child a question and if they have the answer they can mark it off. First person to mark off a line can call out 'BINGO' then they can play for a *full house* (getting all answers on the grid marked off).



### **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! Flip over the cards as though you are playing snap - one each. The first to say the fact based on the cards turned over (e.g.  $3 \times 6 = 18$ ) gets the cards. The person to get majority/all of the cards wins!

## **TIMES TABLES – HELPFUL HINTS**

- ⇒ Make it fun - children enjoy learning much more when it is fun and interactive. Try having an imaginary game of tennis with your 6 x table!
- ⇒ Work on speed - once your child knows all of their times tables, you can then begin to work on reducing the amount of time it takes for them to answer a question.
- ⇒ We all have a few particular times table questions that we get stuck on. If your child finds a particular equation difficult, for example  $7 \times 8 = 56$ , get them to 'single it out' by drawing it in bubble writing with marker pens on a big piece of paper. Stick it up in their room so they see it every time they walk in. You could get them to say it in a silly voice every time they see it, which should help them to remember it even better!
- ⇒ Don't forget to use **correct times table vocabulary when you talk to your child**. First of all, show them a times table number sentence, such as  $6 \times 4 = 24$ . Explain that 6 and 4 are factors of 24, and that 24 is a multiple of 6 and a multiple of 4.
- ⇒ Keep reminding your child that  $3 \times 4$  is the same as  $4 \times 3$  - this effectively halves the number of tables facts they need to learn.

### **Useful websites:**

[www.topmarks.co.uk](http://www.topmarks.co.uk)

-Hit the Button

-Coconut Multiples    -Maths Fishing

[www.timetables.co.uk](http://www.timetables.co.uk)

-Times Tables Shooting    -Times Tables Memory

-Spuq Balloons    -Times Tables Rally

[www.youtube.com](http://www.youtube.com)

-Mr.DeMaio