

# Year 3 and Year 4

## Times Tables Workshop - 20/11/25



Year 4 - Mrs Carroll &  
Mrs Nassa



# What we will cover

## Times Tables 1 to 12

1 times table	2 times table	3 times table	4 times table
$1 \times 1 = 1$	$1 \times 2 = 2$	$1 \times 3 = 3$	$1 \times 4 = 4$
$2 \times 1 = 2$	$2 \times 2 = 4$	$2 \times 3 = 6$	$2 \times 4 = 8$
$3 \times 1 = 3$	$3 \times 2 = 6$	$3 \times 3 = 9$	$3 \times 4 = 12$
$4 \times 1 = 4$	$4 \times 2 = 8$	$4 \times 3 = 12$	$4 \times 4 = 16$
$5 \times 1 = 5$	$5 \times 2 = 10$	$5 \times 3 = 15$	$5 \times 4 = 20$
$6 \times 1 = 6$	$6 \times 2 = 12$	$6 \times 3 = 18$	$6 \times 4 = 24$
$7 \times 1 = 7$	$7 \times 2 = 14$	$7 \times 3 = 21$	$7 \times 4 = 28$
$8 \times 1 = 8$	$8 \times 2 = 16$	$8 \times 3 = 24$	$8 \times 4 = 32$
$9 \times 1 = 9$	$9 \times 2 = 18$	$9 \times 3 = 27$	$9 \times 4 = 36$
$10 \times 1 = 10$	$10 \times 2 = 20$	$10 \times 3 = 30$	$10 \times 4 = 40$
$11 \times 1 = 11$	$11 \times 2 = 22$	$11 \times 3 = 33$	$11 \times 4 = 44$
$12 \times 1 = 12$	$12 \times 2 = 24$	$12 \times 3 = 36$	$12 \times 4 = 48$

- 1) The end goal
- 2) What we teach and when
- 3) Activities and games to help learn times tables
- 4) What is the Multiplication Times Tables Check (MTC)?

# The end goal

Times Tables 1 to 12			
1 times table	2 times table	3 times table	4 times table
1 x 1 = 1	1 x 2 = 2	1 x 3 = 3	1 x 4 = 4
2 x 1 = 2	2 x 2 = 4	2 x 3 = 6	2 x 4 = 8
3 x 1 = 3	3 x 2 = 6	3 x 3 = 9	3 x 4 = 12
4 x 1 = 4	4 x 2 = 8	4 x 3 = 12	4 x 4 = 16
5 x 1 = 5	5 x 2 = 10	5 x 3 = 15	5 x 4 = 20
6 x 1 = 6	6 x 2 = 12	6 x 3 = 18	6 x 4 = 24
7 x 1 = 7	7 x 2 = 14	7 x 3 = 21	7 x 4 = 28
8 x 1 = 8	8 x 2 = 16	8 x 3 = 24	8 x 4 = 32
9 x 1 = 9	9 x 2 = 18	9 x 3 = 27	9 x 4 = 36
10 x 1 = 10	10 x 2 = 20	10 x 3 = 30	10 x 4 = 40
11 x 1 = 11	11 x 2 = 22	11 x 3 = 33	11 x 4 = 44
12 x 1 = 12	12 x 2 = 24	12 x 3 = 36	12 x 4 = 48

- By the end of Year 4, all children are expected to know all of their times tables facts up to 12 x 12.
- This is the result of a gradual build up from Year 1.
  - End of year 1 - fluency in skip counting in 2s, 5s and 10s
  - End Y2: calculating, moving to recall of 2x, 5x and 10x
  - End Y3: recall of 2x, 5x, 10x, teaching and recall of 3x, 4x and 8x
  - End Y4: Recall of all times tables up to 12 x 12
- Times tables are the building blocks for progress. In Y5 and Y6, and beyond, times tables are important for more complex multiplications and mathematical problems, for example ratio.

MULTIPLICATION & DIVISION FACTS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<i>count in multiples of twos, fives and tens</i> (copied from Number and Place Value)	<i>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward</i> (copied from Number and Place Value)	<i>count from 0 in multiples of 4, 8, 50 and 100</i> (copied from Number and Place Value)	<i>count in multiples of 6, 7, 9, 25 and 1 000</i> (copied from Number and Place Value)	<i>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</i> (copied from Number and Place Value)	
	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	recall multiplication and division facts for multiplication tables up to $12 \times 12$		
MENTAL CALCULATION					
		write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Written Methods)	use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	multiply and divide numbers mentally drawing upon known facts	perform mental calculations, including with mixed operations and large numbers
	show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot		recognise and use factor pairs and commutativity in mental calculations (appears also in Properties of Numbers)	multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	<i>associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. <math>\frac{3}{8}</math>)</i> (copied from Fractions)

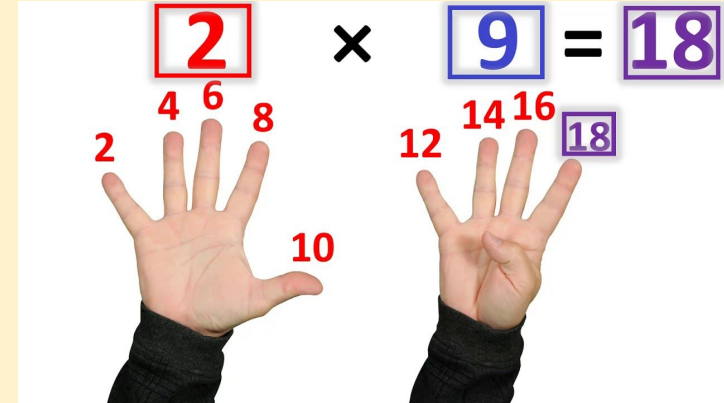
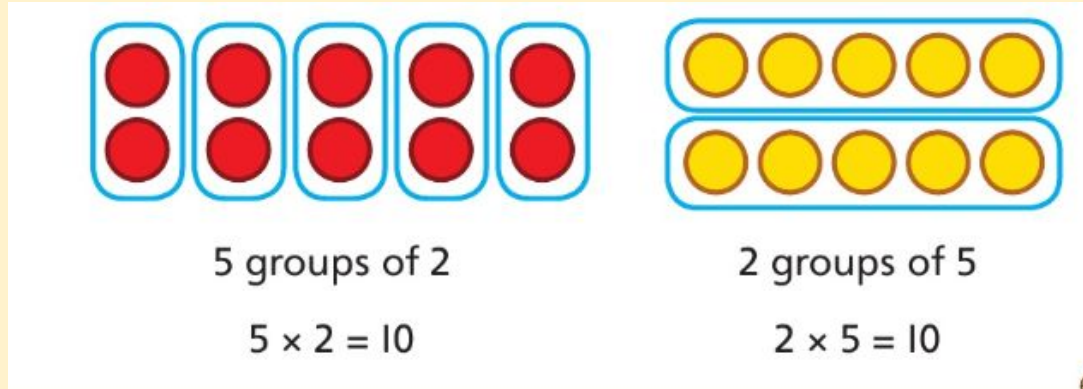
## WRITTEN CALCULATION

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (appears also in Mental Methods)	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
				divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	divide numbers up to 4-digits by a two-digit whole number using the formal written method of short division where appropriate for the context divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
					<i>use written division methods in cases where the answer has up to two decimal places (copied from Fractions (including decimals))</i>

PROPERTIES OF NUMBERS: MULTIPLES, FACTORS, PRIMES, SQUARE AND CUBE NUMBERS					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			recognise and use factor pairs and commutativity in mental calculations (repeated)	identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	identify common factors, common multiples and prime numbers  <i>use common factors to simplify fractions; use common multiples to express fractions in the same denomination</i> (copied from Fractions)
				know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
				establish whether a number up to 100 is prime and recall prime numbers up to 19	
				recognise and use square numbers and cube numbers, and the notation for squared ( <sup>2</sup> ) and cubed ( <sup>3</sup> )	<i>calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units such as mm<sup>3</sup> and km<sup>3</sup></i> (copied from Measures)

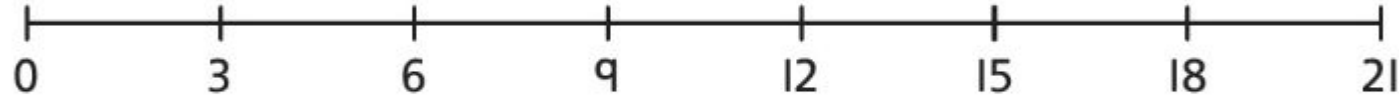
X	1	2	3	4	5	6	7	8	9	10	11	12				
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

# Key understanding to learn multiplication facts



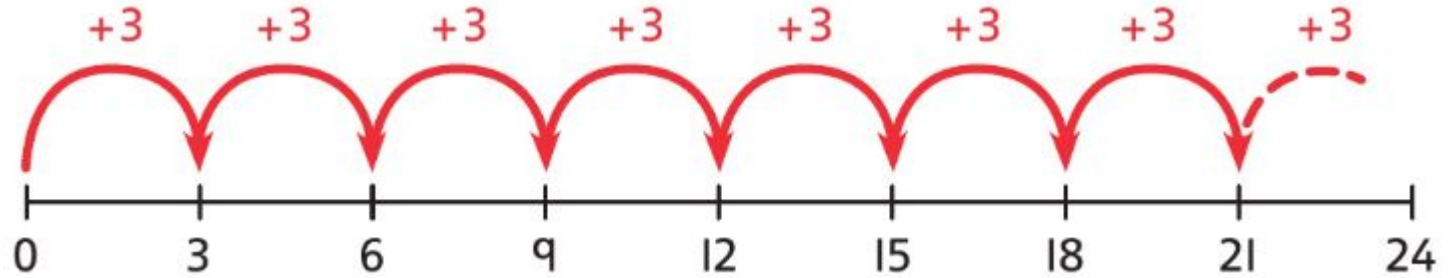
Relationship to  
skip counting and  
repeated addition





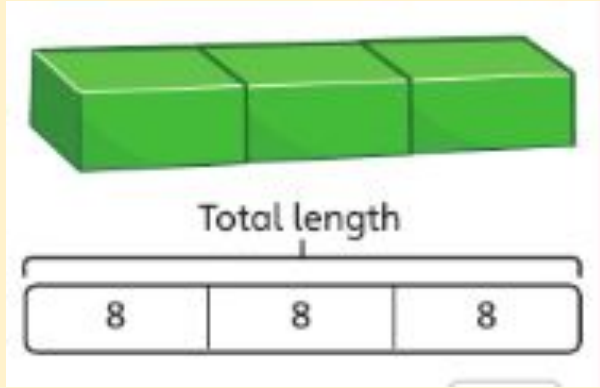
$$3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$$

$$7 \times 3 = 21$$



Number lines enable children to build up tables knowledge from known key facts.

Bar models can be used to represent both  $\times$  and  $\div$  facts



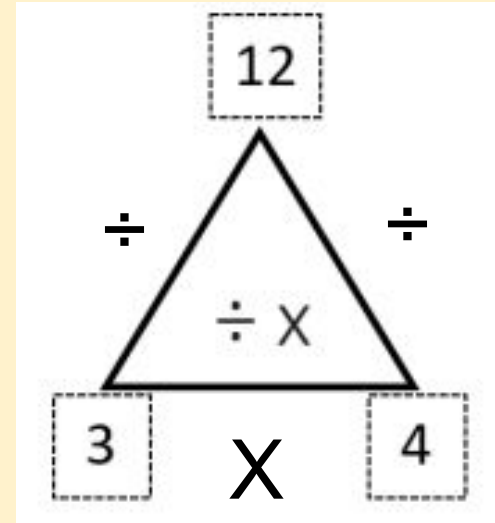
Using known facts to rapidly calculate new facts

$$7 \times 4 = 5 \times 4 \text{ plus } 2 \times 4$$

$$7 \times 4 = 20 + 8$$

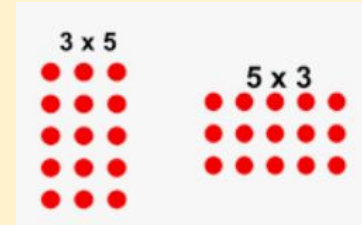
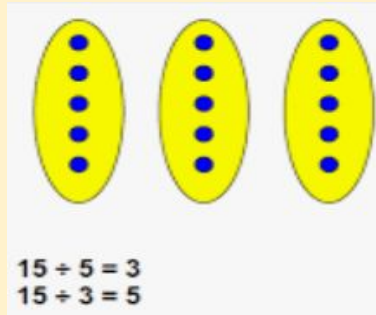
$$7 \times 4 = 28$$

Fact families reinforce recall and relationships between facts

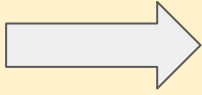


# Activities and games at home to help

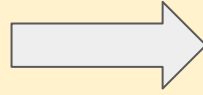
- Different strategies used to teach times tables.
- Children understand the meaning of times tables before learning them.
- Encourage children to see patterns and links. (eg 3 and 6 times tables).



# Learn



# Practise



# Quick recall

e

100 square

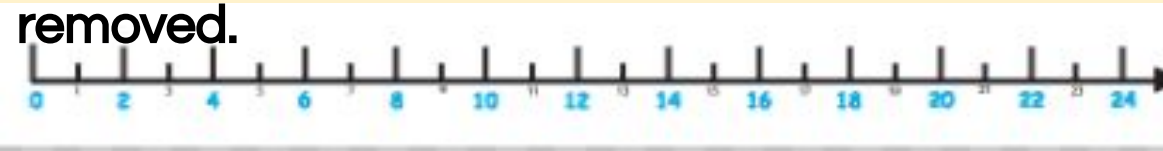
See

patterns

(eg 2, 5, 10)

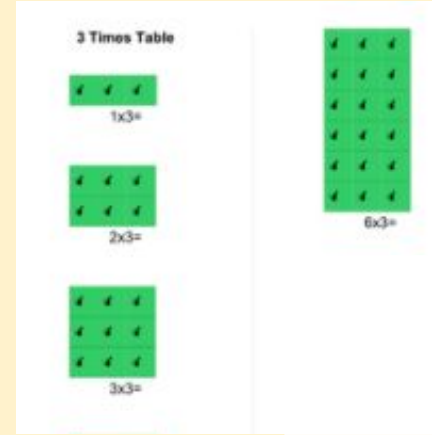
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Number line - write on, orally rehearse,  
gradually remove until all have been  
removed.

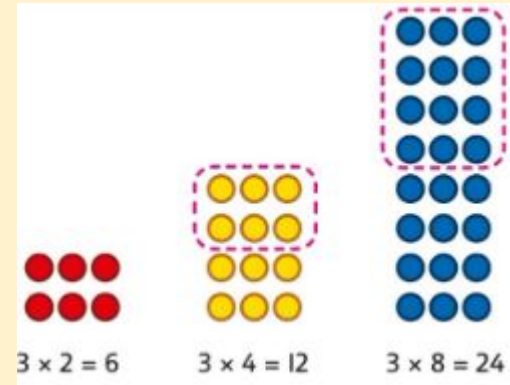


Array

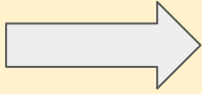
3 times table



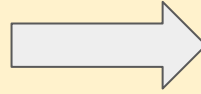
Links between  
the 2, 4 and 8  
times table



# Learn



# Practis



# Quick recall

e

## Recall in order first. Then random.

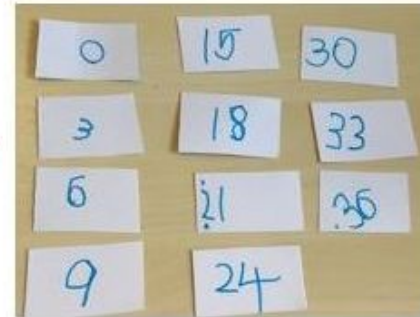
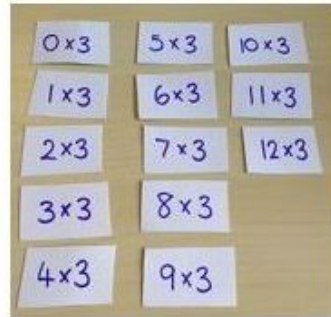
### Games with the cards

On your own, in a pair, with an adult...

- In order first, with the list still visible
- In order, without the list
- Starting with the product, give the fact
- Out of order – choose 'easiest' first
- Out of order – less choice of order
- Speed round

38 © 2020 Herts for Learning

$0 \times 3 = 0$   
 $1 \times 3 = 3$   
 $2 \times 3 = 6$   
 $3 \times 3 = 9$   
 $4 \times 3 = 12$   
 $5 \times 3 = 15$   
 $6 \times 3 = 18$   
 $7 \times 3 = 21$   
 $8 \times 3 = 24$   
 $9 \times 3 = 27$   
 $10 \times 3 = 30$   
 $11 \times 3 = 33$   
 $12 \times 3 = 36$



## 6 second rule!

# Quick recall

- Regular checks
- Little and often
- Not just online (other times of the day)
- Make it fun - who is quicker, who can remember the most, learn with your child, they can test you

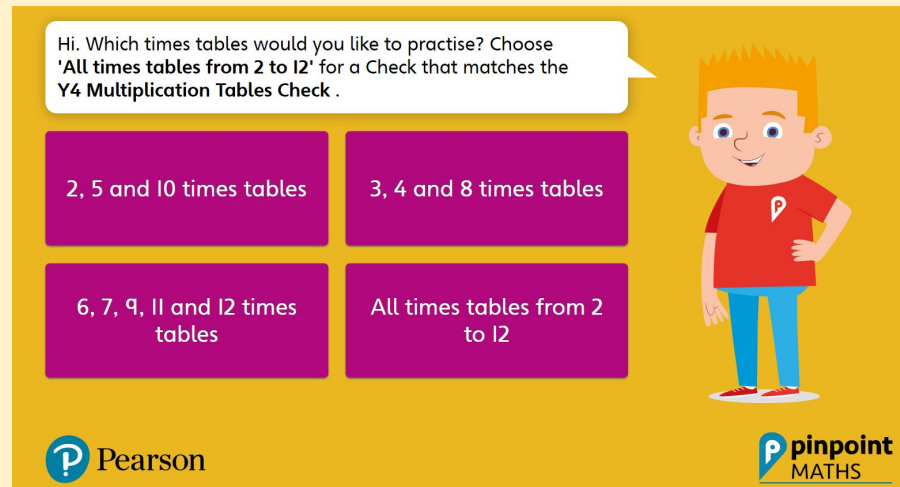


# Online games



Children need their login details.  
Username and password.

<https://ttrockstars.com/>




No login needed.

<https://www.themathsfactor.com/times-tables-check/pinpoint/>




# TTRS game modes




## SINGLE PLAYER

[Game types explained](#)



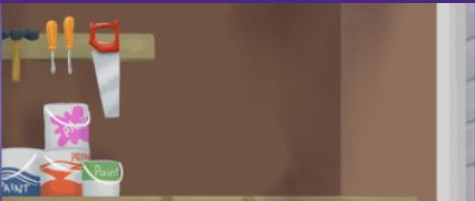
### JAMMING

Take it easy




### GIG

Perform once a month




### GARAGE

Complete your heatmap



### STUDIO

Get a rock status



### SOUNDCHECK

Beat the clock



# What are the different Game Modes?

## Single Player

### Jamming

4 or 8 coins/correct answer

The only game mode without a timer, players chose the table and operation ( $\times$  or  $\div$  or both) they want to practise. Answer 10, 20 or 30 questions.

### Gig

10 coins per correct answer

Gig games last 5 minutes and contain up to 100 questions, which come in 'waves', starting with the 10s, then the 2s, 5s, 3s, 4s, 8s, 6s, 7s, 9s, 11s and 12s. Novices are not expected to get past the 5s. Gigs provide the child (and their teacher) with a simple measure of their current skills, which is why learners should concentrate fully for the whole Gig as they won't get another try until next month.

### Garage

10 coins per correct answer

Players are given a personalised set of 6 multiplication questions (and their matching division questions) in each round. The questions they get keep adjusting to provide the best fit for every learner's needs. This is probably the best game made for improving their recall while they're still learning.

### Studio

1 coin per correct answer

Here your child earns their Rock Status, which is based on their Studio Speed. The faster they are the better their status. Studio Speed is the average of their most recent 10 Studio games. Suitable for confident players.

### Soundcheck

5 coins per correct answer

Soundcheck games ask 25 multiplication questions (up to  $12 \times 12$ ), allowing 6 seconds for each question. Suitable for confident players.

# TTRS information - Heat map using information from 'Garage mode'.

	10	2	5	3	4	8	6	7	9	11	12
10	10 × 10	10 × 2	10 × 5	10 × 3	10 × 4	10 × 8	10 × 6	10 × 7	10 × 9	10 × 11	10 × 12
2	2 × 10	2 × 2	2 × 5	2 × 3	2 × 4	2 × 8	2 × 6	2 × 7	2 × 9	2 × 11	2 × 12
5	5 × 10	5 × 2	5 × 5	5 × 3	5 × 4	5 × 8	5 × 6	5 × 7	5 × 9	5 × 11	5 × 12
3	3 × 10	3 × 2	3 × 5	3 × 3	3 × 4	3 × 8	3 × 6	3 × 7	3 × 9	3 × 11	3 × 12
4	4 × 10	4 × 2	4 × 5	4 × 3	4 × 4	4 × 8	4 × 6	4 × 7	4 × 9	4 × 11	4 × 12
8	8 × 10	8 × 2	8 × 5	8 × 3	8 × 4	8 × 8	8 × 6	8 × 7	8 × 9	8 × 11	8 × 12
6	6 × 10	6 × 2	6 × 5	6 × 3	6 × 4	6 × 8	6 × 6	6 × 7	6 × 9	6 × 11	6 × 12
7	7 × 10	7 × 2	7 × 5	7 × 3	7 × 4	7 × 8	7 × 6	7 × 7	7 × 9	7 × 11	7 × 12
9	9 × 10	9 × 2	9 × 5	9 × 3	9 × 4	9 × 8	9 × 6	9 × 7	9 × 9	9 × 11	9 × 12
11	11 × 10	11 × 2	11 × 5	11 × 3	11 × 4	11 × 8	11 × 6	11 × 7	11 × 9	11 × 11	11 × 12
12	12 × 10	12 × 2	12 × 5	12 × 3	12 × 4	12 × 8	12 × 6	12 × 7	12 × 9	12 × 11	12 × 12

Questions with purple borders are the ones this pupil will practise in Garage. The colours on this page relate to the speed shown in this table:

0 - 1s	1 - 2s	2 - 3s	3 - 4s	4 - 5s	5 - 6s	6 - 7s	7 - 8s	8 - 9s	9 - 10s	> 10s
--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	-------

## TTRS - Year 3

**In Year 3**, teachers also set tables to focus on in line with the class curriculum.

Children should use **jamming** to help practise and consolidate times tables without time constraints.

The **garage mode** ensure their heat map is updated and shows progress visually for both the teacher and child.

A monthly **gig**, provides the teacher with data about their progress, gaps to plug and tables to target.

# TTRS - Year 4

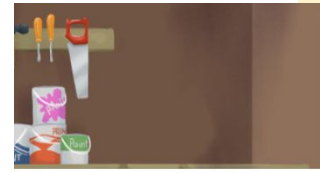
In Year 4, children should use **Garage mode** to ensure their heat map is updated and shows progress made.

Children should also use **soundcheck** to prepare them for the MTC. 25 questions with 6 seconds to answer the questions.

April/ May children can also use **studio**.



**SOUNDCHECK**  
Beat the clock



**GARAGE**  
Complete your heatmap

# ➤ MTC PREP SCHEDULE



**MARCH**

**SOUNDCHECK**  
(games per week)  
**5**

**GARAGE**  
(mins per week)  
**16**



**APRIL**

**SOUNDCHECK**  
(games per week)  
**3**

**STUDIO**  
(games per week)  
**3**

**GARAGE**  
(mins per week)  
**15**

**Year 4**

**MAY**

**SOUNDCHECK**  
(games per week)  
**6**

**STUDIO**  
(games per week)  
**15**

**JUNE**

**SOUNDCHECK**  
(games per week)  
**21**

**21 minutes a week is the  
magic number for achieving  
top MTC scores.**

# Y4 Multiplication Tables Check

**Monday 1st June 2026 - Friday 12th June 2026**

- Children in Year 4
- 25 questions plus 3 practise questions
- 6 seconds to answer each question with 3 seconds in between questions
- Children have been trained to enter the answer but to allow the time to lapse (No need to press enter)
- Focus more on KS2 tables with minimal checking of KS1 tables
- There are no division questions it is a multiplication check.

# Y4 Multiplication Tables Check

- Questions about the 6, 7, 8, 9, and 12 times table come up more often, questions are generated randomly
- Access arrangements are available for those who need it
- There is no pass mark - the government expectation is for all children to score 25
- Parents/carers receive the results in the end of year reports



## Multiplication tables check

### Do you have a child in year 4 at primary school?

If so, your child will be participating in the multiplication tables check (MTC) in June.

The purpose of the check is to determine whether your child can fluently recall their times tables up to 12, which is essential for future success in mathematics. It will also help your child's school to identify if your child may need additional support.

### What is the multiplication tables check?

It is an on-screen check consisting of 25 times table questions. Your child will be able to answer 3 practice questions before taking the actual check. They will then have 6 seconds to answer each question. On average, the check should take no longer than 5 minutes to complete.

### What if my child cannot access the check?

There are several access arrangements available for the check, which can be used to support pupils with specific needs. Your child's teacher will ensure that the access arrangements are appropriate for your child before they take the check in June.

The check was designed to be inclusive and accessible to as many children as possible, including those with special educational needs or disability (SEND) or English as an additional language (EAL). However, there may be some circumstances in which it will not be appropriate for a pupil to take the check, even when using suitable access arrangements.

If you have any concerns about your child accessing the check, you should discuss this with your child's headteacher.

### Do I need to do anything to prepare my child for the check?

No, you do not need to do anything additional to prepare your child for the check. As part of usual practice, teachers may ask you to practise times tables with your child.

Schools will have unlimited access to a 'try it out' area from April. They can use this to make sure pupils have the necessary support to access the check. This includes opportunities for pupils to familiarise themselves with the check application and try out any access arrangements that may be required.

### How will the results be used?

Schools will have access to all their pupils' results, to allow them to identify pupils who need additional support.

### Will I receive feedback on my child's check?

Yes. Your child's teacher will share your child's score with you, as they would with all national curriculum assessments. There is no pass mark for the check.



A link to this document has been added to the Year 4 page on the website.

**Information for parents:**  
2024 multiplication tables check





By the time the children sit the check they should be:

- Confident in their recall of multiplication facts for all tables tables
- Familiar with the format
- Unfazed by the process - part of our daily classroom practise
- Clearly applying this knowledge and understanding to other areas of maths and problem solving

# Time to Practise!

Hi. Which times tables would you like to practise? Choose **'All times tables from 2 to 12'** for a Check that matches the **Y4 Multiplication Tables Check**.

2, 5 and 10 times tables

3, 4 and 8 times tables

6, 7, 9, 11 and 12 times  
tables

All times tables from 2  
to 12



# Thank you for your time today.

## Questions?



"At the end of the day, the most overwhelming key to a child's success is the positive involvement of parents."

Jane D. Hull