

# Welcome!



×	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

Times tables and Multiplication Tables Check briefing

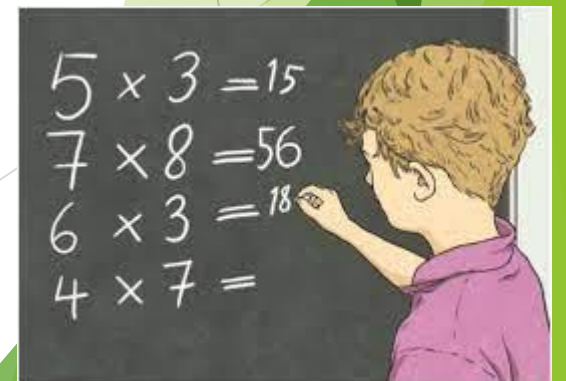
11<sup>th</sup> March 2025

# Aims

- ▶ To understand what the **Multiplication Tables Check (MTC)** is and what the expectations are.
- ▶ To understand the **importance of times tables fluency** and the impact it has on overall maths development and efficiency.
- ▶ To understand **how, when and why** the Multiplication Tables Check (MTC) will be administered.
- ▶ To achieve a stronger understanding of **how times tables is taught through the school.**
- ▶ To provide you with a **range of strategies** you can use with your child at home.
- ▶ To see/join in with some times tables activities in the classroom.

# Times tables expectations in primary schools

- ▶ Times tables has **always** been a huge focus at primary level.
- ▶ Since 2014, Primary school children have been **expected to know all their times tables up to 12 x12 by the end of year 4.**
- ▶ The Multiplication Tables Check (MTC) was first proposed in 2017 and since 2020 it has been statutory for all Year 4 children nationwide.



# What is the MTC?

- ▶ 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.

$$5 \times 6 =$$

1	2	3
4	5	6
7	8	9
⌫	0	Enter

Children do not have to press enter. Whatever is in the answer box after 6 seconds will be registered.

During practice checks, we advise children to not press enter to help avoid mistakes.

# Administering the MTC check

- ▶ We will have a two week window between the 2<sup>nd</sup> and 13<sup>th</sup> June to conduct the MTC.
- ▶ We do not need to conduct all of the checks on the same day.
- ▶ We will spread the checks out and conduct them in small groups in a quiet area.
- ▶ Children can practise before the test. The ‘sound check’ mode on TT Rockstars is another good practise tool (this replicates the official test)
- ▶ If there are any issues during the check e.g technical, illness we can apply for a retest.
- ▶ 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.

# What happens with the results?

- ▶ There is no pass mark for the MTC.
- ▶ Schools will have access to all their pupils' results, to allow them to **identify pupils who need additional support** so they can access the Y5 and Y6 maths curriculum with success.
- ▶ We will share the results with parents ASAP.
- ▶ The government may use the data to analyse national and local performance.

## Popular questions

- ▶ There will always be questions from the 3, 4, 5, 6, 7, 8, 9, 11 and 12 multiplication tables in each check.
- ▶ There will only be a maximum of 7 questions from the 2, 5 and 10 times tables combined.
- ▶ From recent tests, the following 11 multiplication questions are more likely to be asked:

- $6 \times 6$
- $6 \times 7$
- $6 \times 8$
- $6 \times 9$
- $6 \times 12$
- $7 \times 8$
- $7 \times 9$
- $7 \times 12$
- $8 \times 9$
- $8 \times 12$
- $12 \times 12$

# Importance of times tables

- ▶ It is vital that children are able to quickly recall their times tables before Year 5 and 6. **They are the building blocks for future mathematical success.**
- ▶ We believe it is achievable for all children to be able to recall times tables with the correct teaching and enough practise.
- ▶ Research by the Education Endowment Foundation (EEF) suggests that pupils with automatic recall of multiplication facts perform better in problem solving tasks.
- ▶ Automatic memorisation of times tables **frees up working memory to be used on other tasks** (Hunt & Ellis, 1999).
- ▶ Quite simply, confidence with times tables will give children more confidence in maths as a whole and more chance of success.

## WHY ARE TIMES TABLES IMPORTANT?

### SUPPORT LEARNING

Times tables serve as a building block for higher-level maths concepts.

With a strong understanding of multiplication, children will succeed with topics such as division, fractions, algebraic equations, and more!

### STRENGTHEN LIFE SKILLS

Times tables have practical applications in our daily lives.

From calculating prices and discounts while shopping, to managing budgets, multiplication is an essential skill for financial literacy and general problem-solving.

### BUILD CONFIDENCE

Children feel more confident in their mathematical abilities when they have a solid grasp of times tables.

They'll be up for tackling more challenging mathematical tasks and increase their success and enjoyment of Maths!



# Times tables in wider maths

## SATs analysis

- ▶ In Paper 1 (Arithmetic) there were 21 out of 36 questions which definitely require children to have fluent times tables knowledge.
- ▶ In Papers 2 and 3 (Reasoning) there are 20 out of 44 questions which also require children to have fluent times tables knowledge.

Year 6:

29											6 x 3	
											6 x 1	
Show your method											6 x 4	<input type="text" value="654418"/>
											6 x 5	
											8 x 3	
											8 x 1	
											8 x 4	
										8 x 5	<input type="text" value=""/>	
										2 marks		

$$\begin{array}{r} 5413 \\ \times 86 \\ \hline 32478 \\ 433040 \\ \hline 465518 \end{array}$$

Children need to:

- Know 6 x 3; 6 x 1; 6 x 4; 6 x 5; 8 x 3; 8 x 1; 8 x 4; 8 x 5
- (as well as how to carry out this procedure accurately)

12	5,400 ÷ 9 =		<input type="text" value="600"/>	<input type="text" value=""/>	1 mark
$\begin{array}{l} 9 \times 6 = 54 \\ 9 \times 600 = 5,400 \\ 5,400 \div 9 = 600 \end{array}$					

Children need to:

- Know 9 x 6 = 54 so 9 x 600 = 5,400
- Know that 9 x 600 = 5,400 so 5,400 ÷ 9 = 600 (inverse)

17	$\frac{5}{7} + \frac{3}{21} =$		<input type="text" value="18/21"/>	<input type="text" value=""/>	1 mark
$\begin{array}{r} \frac{5}{7} = \frac{15}{21} \\ \frac{15}{21} + \frac{3}{21} = \frac{18}{21} \end{array}$					

Children need to:

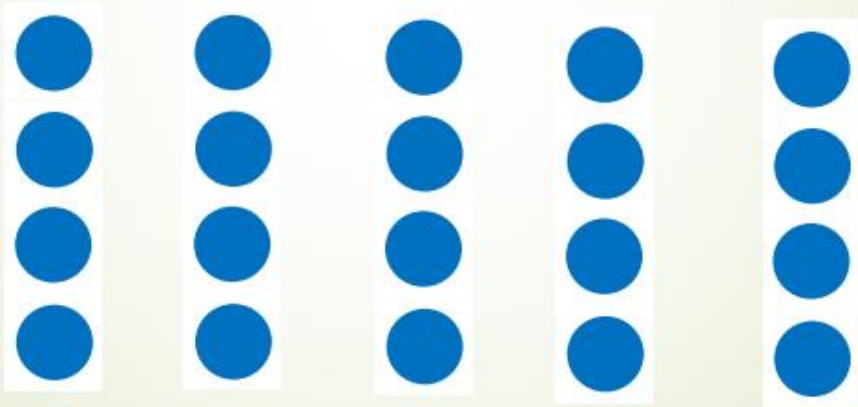
- Know 21 = 7 x 3
- Multiply the numerator by 3 (5 x 3 = 15) and the denominator by 3 (7 x 3 = 21) to create the equivalent fraction 15/21 to use in the calculation

# Key understanding

## Multiplication is the inverse of division

$20 \div 5 = 4$  can be worked out because  $5 \times 4 = 20$ .

Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



## Multiplication is commutative

$3 \times 2$  is the same as  $2 \times 3$ .

Children need to understand that multiplication can be completed in any order to produce the same answer. Sometimes this link needs to be made explicit.

Arrays for  $2 \times 3$

3 lots of 2 = 6



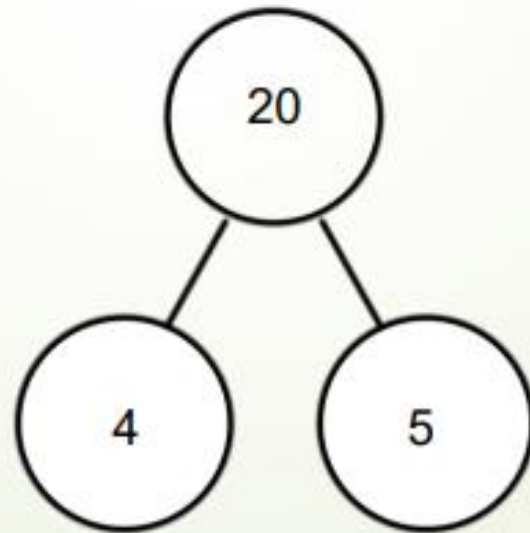
2 lots of 3 = 6



# Number families

$$4 \times 5 = 20, 5 \times 4 = 20, 20 \div 5 = 4, 20 \div 4 = 5$$

Due to their commutative understanding, children should also be able to see whole number families. For many children this will need to be pointed out and discussed.



# How we teach times tables at The Gates

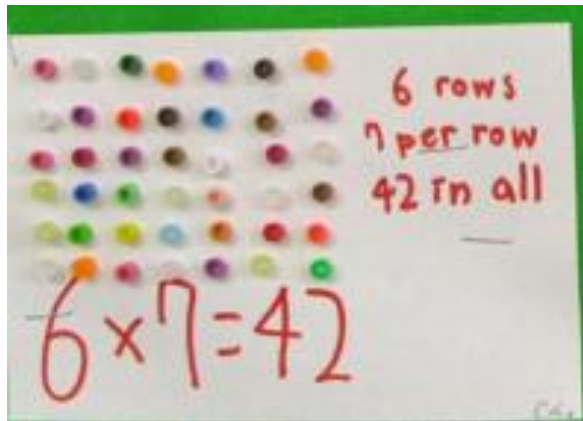
It starts before Year 4:

**Year 1** - Count in multiples of 2, 5 and 10

**Year 2** - Learn their x2, x5 and x 10 Count in multiples of 3

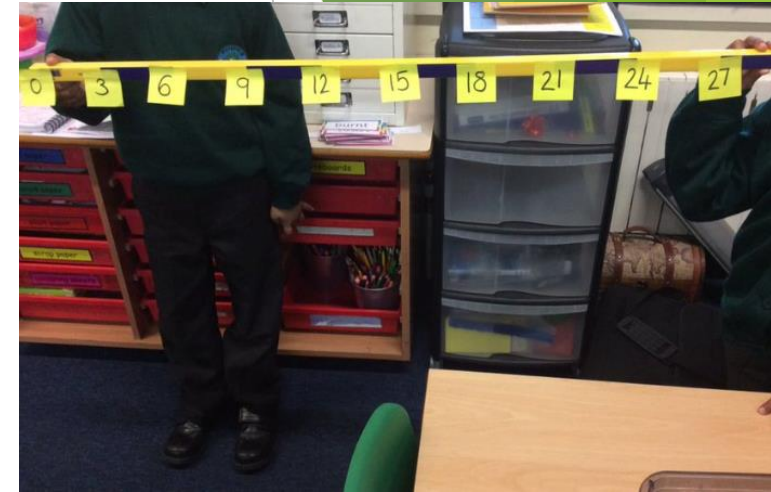
**Year 3** - Learn their x3, x4 and x 8

**Year 4** - x6, x7, x9, x11, x12



What we do:

- Daily chanting of times tables
- TT Rockstars.
- Teachers analyse data to identify individual targets.
- Times tables buddies.
- Times tables songs
- Times tables games.

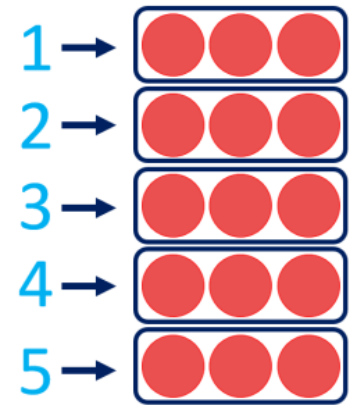


$$5 \times 3$$

“5 lots of 3”

“5 equal groups of 3”

$$3 + 3 + 3 + 3 + 3$$



It is imperative that children understand that multiplication is the same as repeated addition.



# Assessment

- ▶ We regularly assess children's times tables results.
- ▶ This allows us to provide further support to those who may need it.
- ▶ Allows us to identify individual and group patterns or gaps with understanding.
- ▶ Gives children valuable experience of the MTC check process.

MON 10 MAR 2025

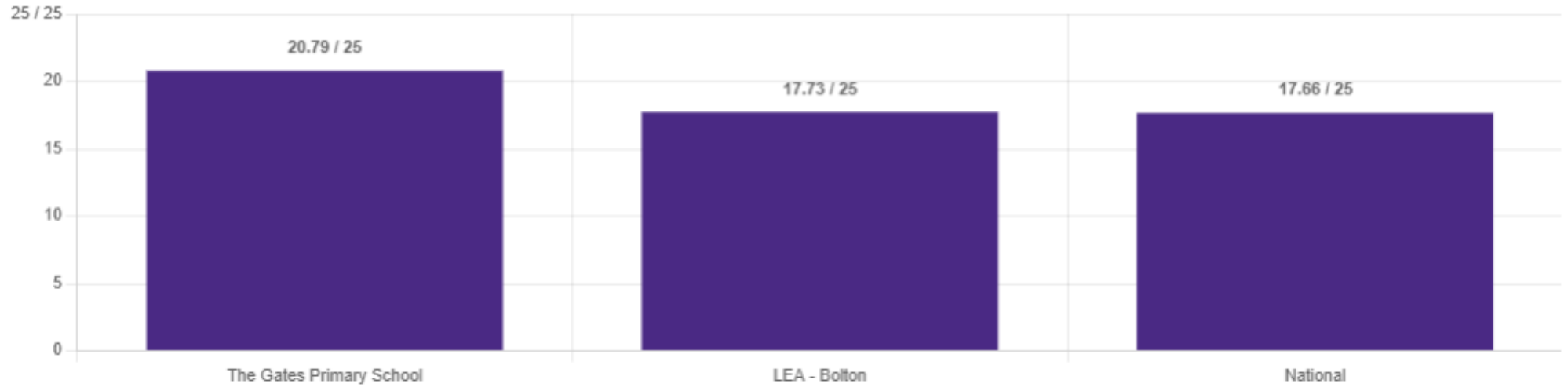
	10	2	5	3	4	8	6	7	9	11	12
10	10 x 10	10 x 2	10 x 5	10 x 3	10 x 4	10 x 8	10 x 6	10 x 7	10 x 9	10 x 11	10 x 12
2	2 x 10	2 x 2	2 x 5	2 x 3	2 x 4	2 x 8	2 x 6	2 x 7	2 x 9	2 x 11	2 x 12
5	5 x 10	5 x 2	5 x 5	5 x 3	5 x 4	5 x 8	5 x 6	5 x 7	5 x 9	5 x 11	5 x 12
3	3 x 10	3 x 2	3 x 5	3 x 3	3 x 4	3 x 8	3 x 6	3 x 7	3 x 9	3 x 11	3 x 12
4	4 x 10	4 x 2	4 x 5	4 x 3	4 x 4	4 x 8	4 x 6	4 x 7	4 x 9	4 x 11	4 x 12
8	8 x 10	8 x 2	8 x 5	8 x 3	8 x 4	8 x 8	8 x 6	8 x 7	8 x 9	8 x 11	8 x 12
6	6 x 10	6 x 2	6 x 5	6 x 3	6 x 4	6 x 8	6 x 6	6 x 7	6 x 9	6 x 11	6 x 12
7	7 x 10	7 x 2	7 x 5	7 x 3	7 x 4	7 x 8	7 x 6	7 x 7	7 x 9	7 x 11	7 x 12
9	9 x 10	9 x 2	9 x 5	9 x 3	9 x 4	9 x 8	9 x 6	9 x 7	9 x 9	9 x 11	9 x 12
11	11 x 10	11 x 2	11 x 5	11 x 3	11 x 4	11 x 8	11 x 6	11 x 7	11 x 9	11 x 11	11 x 12
12	12 x 10	12 x 2	12 x 5	12 x 3	12 x 4	12 x 8	12 x 6	12 x 7	12 x 9	12 x 11	12 x 12
NO DATA	0 - 1 s	1 - 2 s	2 - 3 s	3 - 4 s	4 - 5 s	5 - 6 s	6 - 7 s	7 - 8 s	8 - 9 s	9 - 10 s	> 10 s

If you have not received an individual heat map, please ask your class teacher

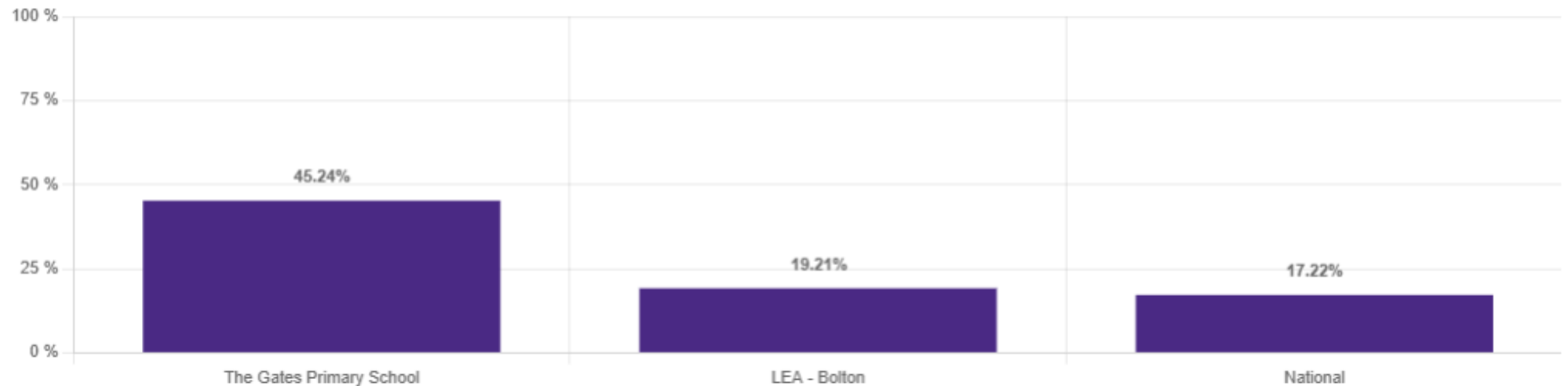
## ii. Average Score Comparison



Our most recent  
'unofficial' results.



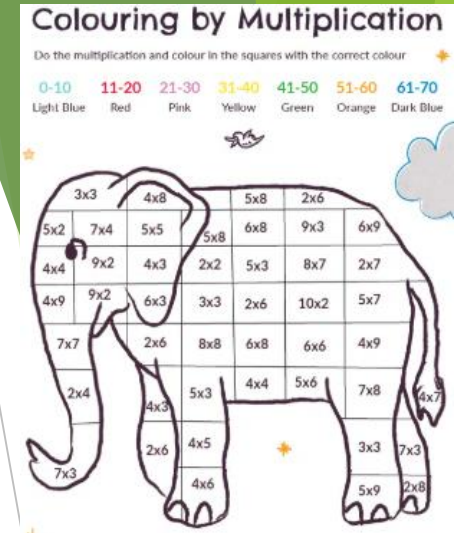
## ✦ Percentage of pupils who scored 25/25



# How you can help

- ▶ Climb stairs counting in multiples.
- ▶ Listen to and learn times tables songs (lots of these on YouTube)
- ▶ TT Rockstars daily.
- ▶ Have times tables visible at home.
- ▶ White Rose Maths 'One Minute Maths' - good for specific tables.

If your child is practising regularly at home, they are practising for the benefit of their wider math's education.



**“Mastering both division and multiplication tables is crucial because it helps reduce students' cognitive load. When students know their maths facts by heart, they free up mental space to focus on more complex maths problems.”**



If you have any questions, queries or concerns, I will stay behind in the hall.

TT Buddies will escort parents to classes.

Teachers will ask you to leave via the external doors at 3.10 to give them time to prepare for home time.