



Standards
& Testing
Agency

TIMES TABLES WORKSHOP

For Year 4 Parents
Wednesday 15th October and
Thursday 16th October 2025



8:35 – Tea and Coffee in the hall

8:45 – Welcome and a look at multiplication and TT Rockstars

9:05 – Children come to join us and we explore the different games on TT Rockstars

9:40 – Review our next steps

10:00 - Depart

TIMES TABLES WORKSHOP

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How do you feel about maths?

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What have you said to your children about how you feel at maths?

How do you feel about maths?

Key Findings from Studies

- Negative messages matter:** When mothers say things like *“I’m not good at maths”* or *“maths is hard,”* daughters often internalize these beliefs. One study by Eccles & Jacobs (1986) found that such comments led to an immediate decline in girls’ maths achievement.
- Math anxiety is contagious:** Neuroscientist Erin Maloney and colleagues discovered that parents’ maths anxiety can reduce their children’s learning—especially if those parents help with maths homework.
It wasn’t the parents’ maths knowledge that mattered, but their anxiety levels.
- Gendered perceptions persist:** A Mumsnet and National Numeracy survey found that 41% of parents remembered their mums saying negative things about maths, compared to just 14% recalling similar comments from dads. This kind of messaging contributes to a gender gap in number confidence.

Pupil perception Survey - 2025


	Boys	Girls
	2025	
Maths lessons	81	64

SATs results 2025


<u>Maths Data</u>	Maths May
% Girls 100+	91%
% Boys 100+	91%
% Girls 110+	41%
% Boys 110+	55%

How do you feel about maths?


 **Instead of: “*Maths is hard.*”**

 Try: “*Maths can be challenging sometimes, but that’s how we learn and grow.*”
This normalizes struggle and frames it as part of the learning process.


 **Instead of: “*I was never any good at maths.*”**


 Try: “*I didn’t always find maths easy, but I kept trying and got better.*”
This shows that ability isn’t fixed—it can improve with effort.


 **Instead of: “*I’m just not a maths person.*”**

 Try: “*Everyone can learn maths—it’s about practice, not being born with it.*”
This helps dismantle the myth that maths talent is innate.

 **Instead of: “*I don’t like maths.*”**

 Try: “*I didn’t always enjoy maths, but I love how it helps us solve problems.*”
This shifts the focus to the usefulness and creativity of maths.

 **Instead of: “*You’re more of a words person than a numbers person.*”**


 Try: “*You’re great with words—and you can be great with numbers too!*”
This avoids boxing children into limiting identities.

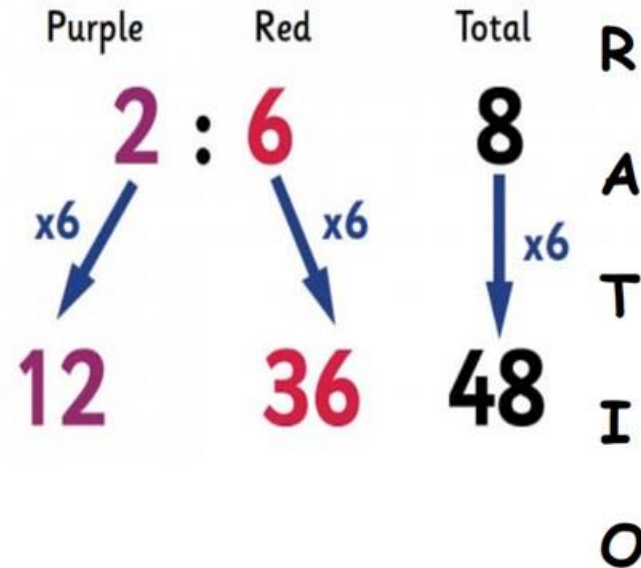
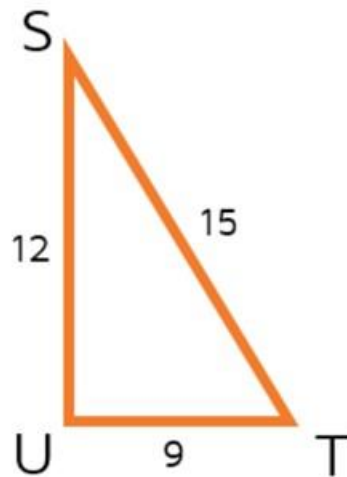
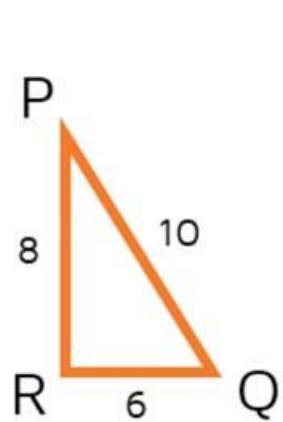
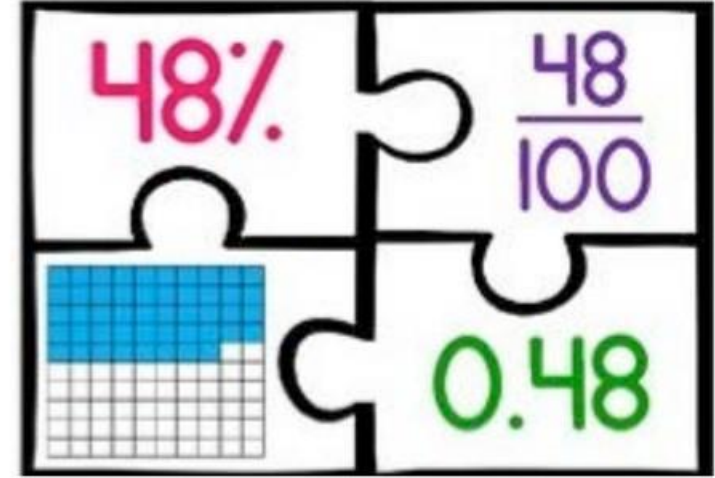
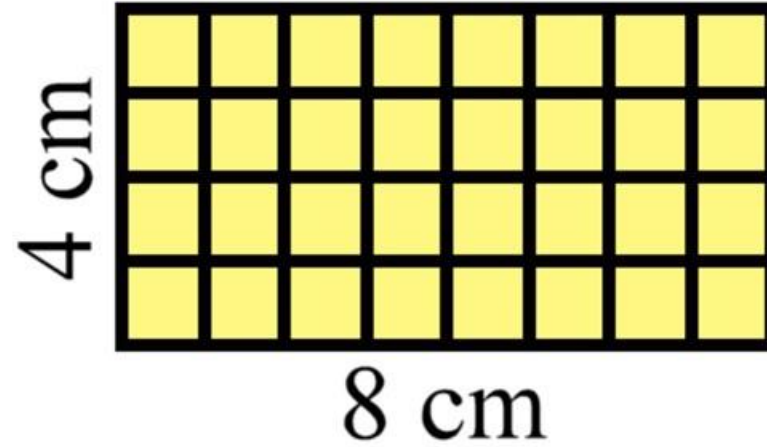
National Expectations




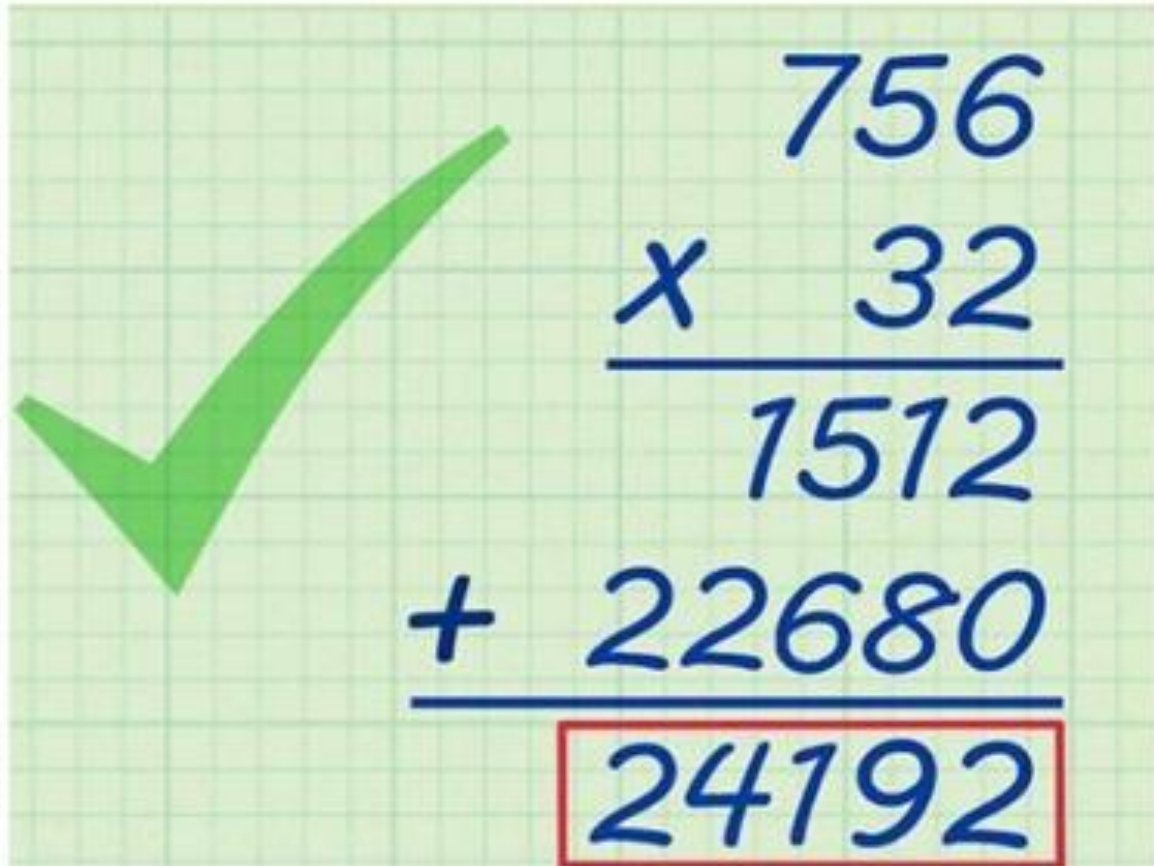
Year Group	Expectation
Year 1	Count in multiples of 2, 5 and 10 . Recall and use all doubles to 10 and corresponding halves.
Year 2	Recall and use multiplication and division facts for the 2, 5 and 10 times tables including recognising odd and even numbers .
Year 3	Recall and use multiplication and division 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

Why is Multiplication important?


$$\begin{array}{r} 756 \\ \times 32 \\ \hline 1512 \\ + 22680 \\ \hline \boxed{24192} \end{array}$$




$$\begin{array}{r} 756 \\ \times 32 \\ \hline 1512 \\ + 22680 \\ \hline 24192 \end{array}$$

A handwritten multiplication problem is shown on a green grid background. A large green checkmark is on the left. The problem is:
$$\begin{array}{r} 756 \\ \times 32 \\ \hline 1512 \\ + 22680 \\ \hline 24192 \end{array}$$
 The final result, 24192, is enclosed in a red rectangular box.

How Times Tables Fluency Supports Long Multiplication

Reduces cognitive load: Working memory has limited capacity. If a child knows their times tables fluently, they free up mental space to focus on the steps of long multiplication rather than struggling with basic facts.

Speeds up processing: Fluent recall of multiplication facts means children can move through calculations more quickly and confidently, reducing frustration and errors.

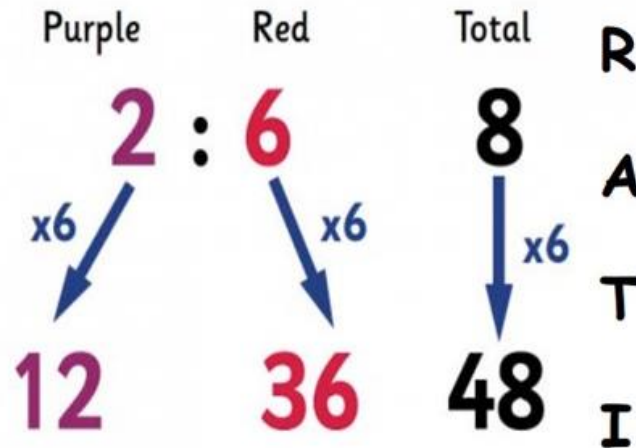
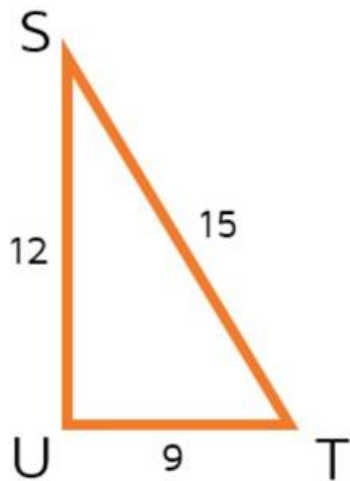
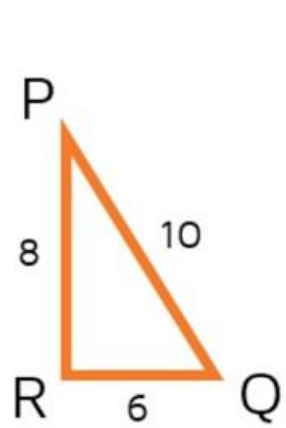
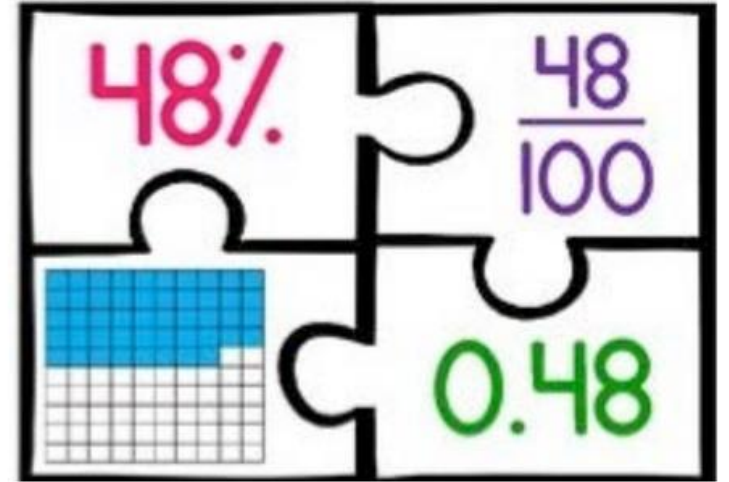
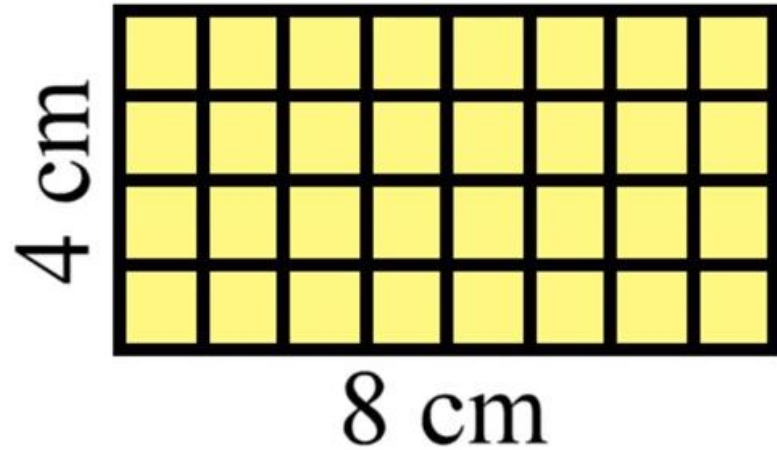
Supports multi-step thinking: Long multiplication involves holding partial products, place value shifts, and exchanging digits—all at once. Times tables fluency allows children to manage these steps without overloading their working memory.

Improves accuracy: When multiplication facts are automatic, children are less likely to guess or make mistakes under pressure.

Builds confidence and stamina: Fluency creates a sense of mastery. Children who feel secure with their times tables are more willing to tackle longer, more complex problems.

Enables mental checking: Fluent children can spot errors more easily by estimating or mentally checking their answers, which is a key skill in developing mathematical reasoning.

$$\begin{array}{r}
 756 \\
 \times 32 \\
 \hline
 1512 \\
 + 22680 \\
 \hline
 \boxed{24192}
 \end{array}$$



Year 6
SATs

Multiplication Table Check (MTC)



- The Multiplication Tables Check (MTC) will be administered to children in Year 4 in June 2026.
- The purpose of the MTC is to determine whether Year 4 pupils can recall their multiplication tables up to 12x12 fluently as outlined in the National Curriculum.
- Children will be tested using an iPad, where they will have to answer multiplication questions against the clock. The test will last no longer than 5 minutes; children will have 6 seconds to answer each question in a series of 25.

Department for Education

The DfE state that the motivation behind the MTC is purely to allow teachers a chance to identify children who need some more help with their times tables to stop them from falling further behind their peers as they move up to Year 5 and then Year 6.

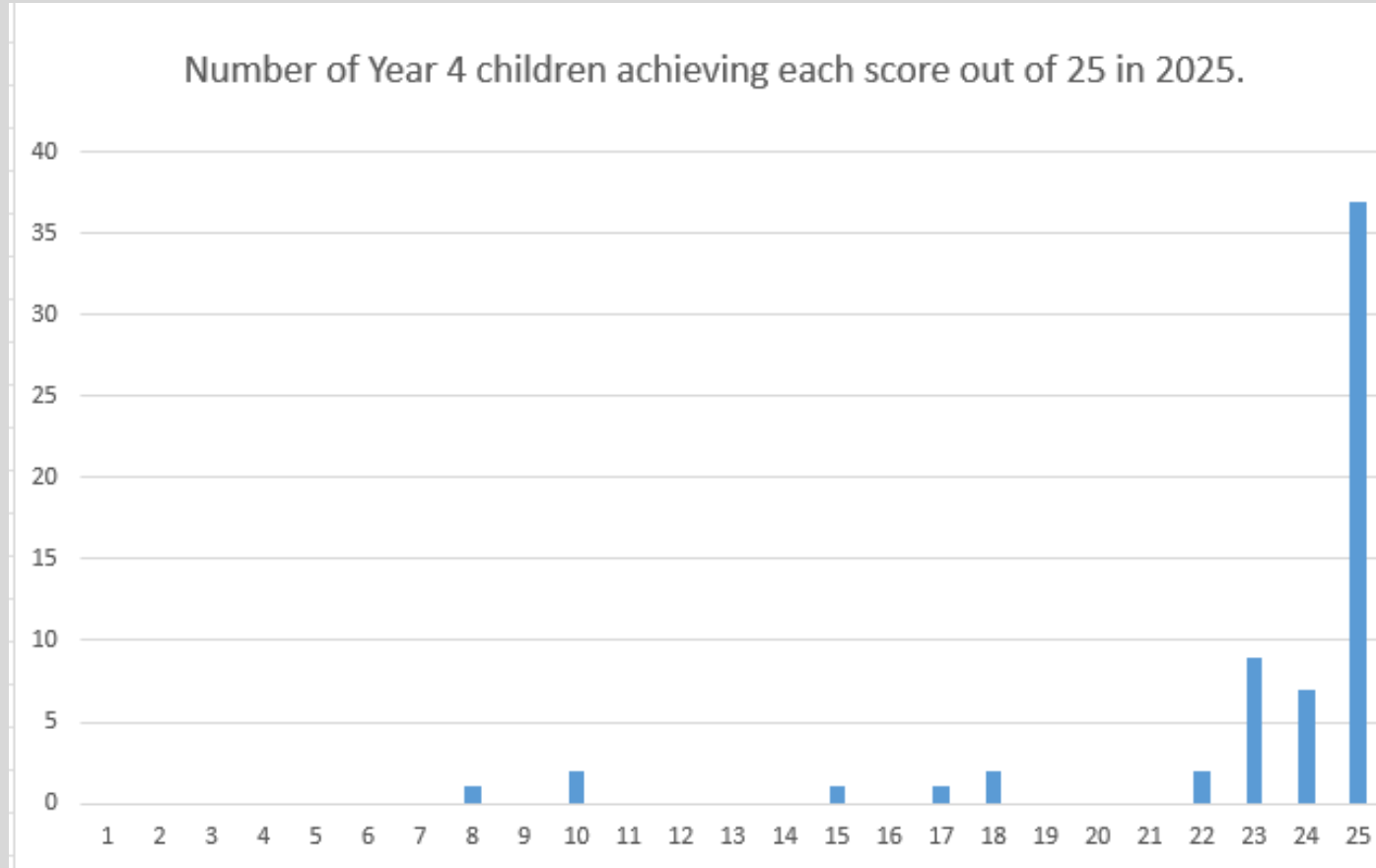


**Department
for Education**

MTC data compared to national averages

Attainment Results	2023	2024	2025	National Average 2025
Average score out of 25	22.4	24.2	23.5	21.1
% achieving full marks	33%	62%	61%	35%

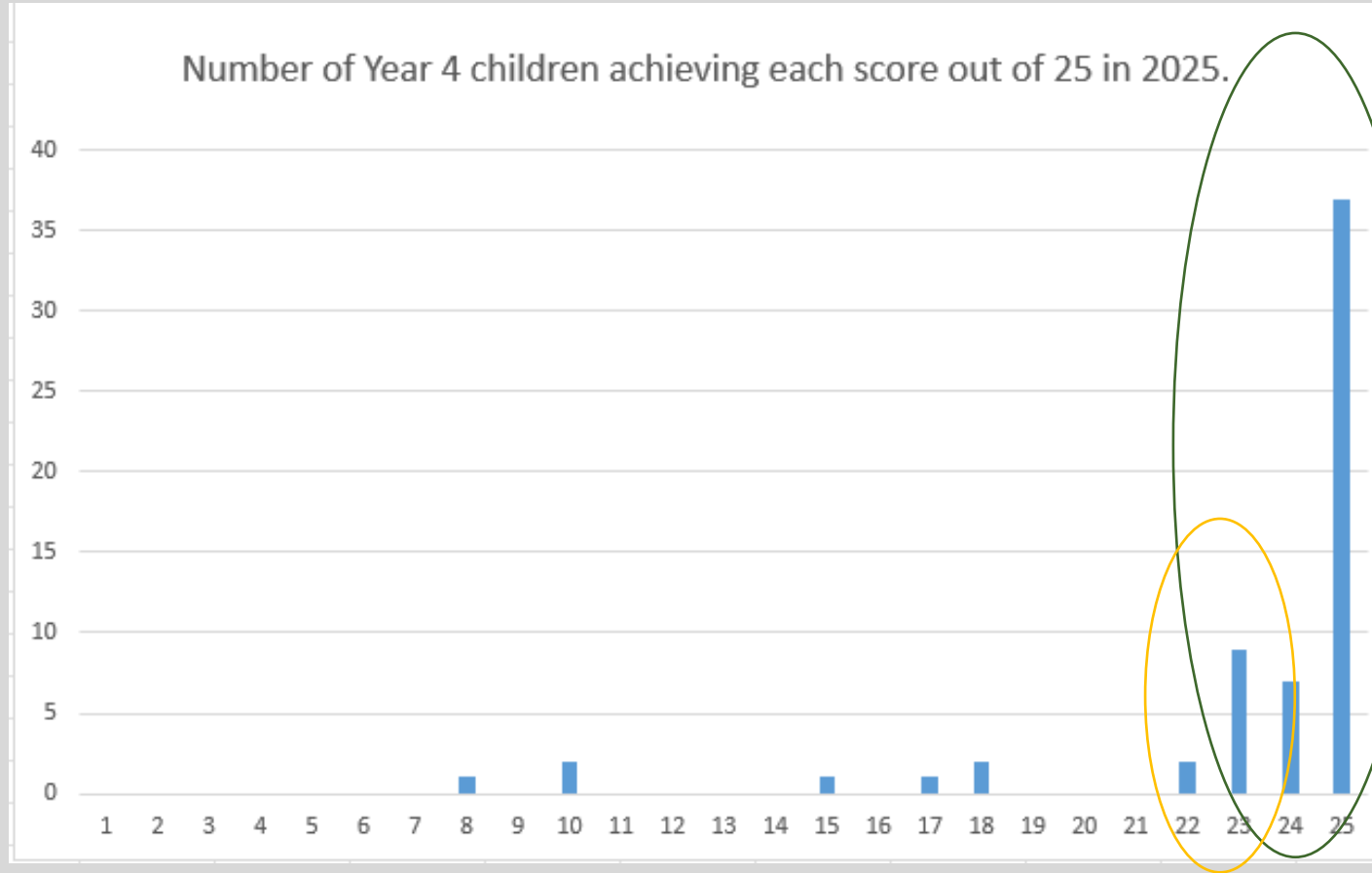
How did we do last year?



- The Katherine Semar average score for 2025 was 23.5 with 61% achieving 25 out of 25

Score	Number of children achieving each score
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	1
9	0
10	2
11	0
12	0
13	0
14	0
15	1
16	0
17	1
18	2
19	0
20	0
21	0
22	2
23	9
24	7
25	37

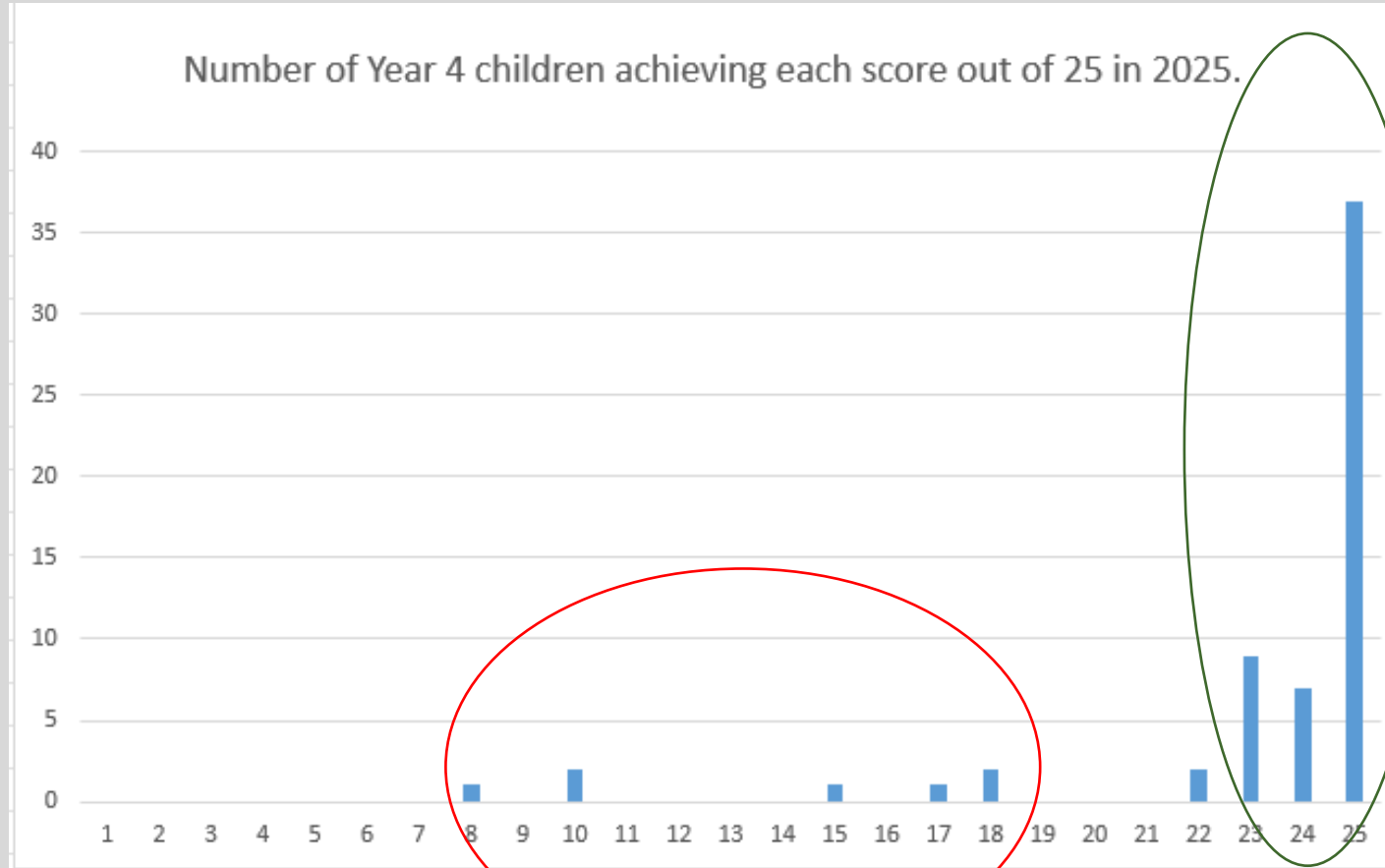
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9	1
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	3
23	6
24	11
25	38

How did we do last year?



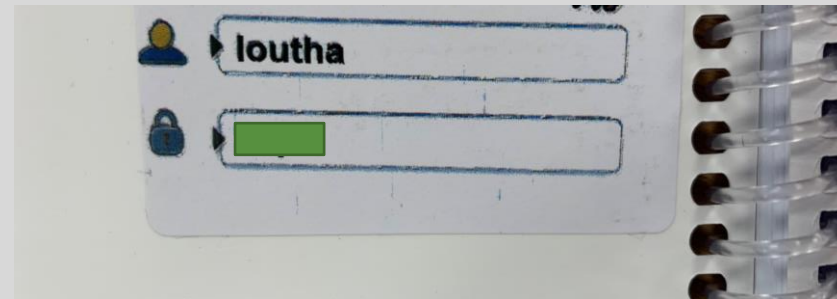
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12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	3
23	6
24	11
25	38

How should we practise our times tables at home?



TIMES TABLES ROCK STARS




<https://www.youtube.com/watch?v=4G-pFJJNhI4>















This video takes you through the games in TT Rockstars

<https://www.youtube.com/watch?v=4G-pFJJNhI4>


Elephants

Effort - Last 30 days 











STATS BOLT-ON

First Name	Last Name	 Average Time Played Each Day 	Days played	 Coins Earned	 Number of Correct Answers
		7m 27s 	19	12,055	2,922
		6m 9s 	20	4,121	2,067
		4m 58s 	14	4,109	951
		3m 44s 	15	3,113	743
		3m 7s 	7	3,974	862
		2m 40s 	6	1,584	386
		2m 36s 	11	2,648	958
		2m 33s 	7	1,951	812

Okapi

Effort - Last 30 days 

★ STATS BOLT-ON ★

First Name	Last Name	 Average Time Played Each Day 	Days played	 Coins Earned	 Number of Correct Answers
		6m 40s	 22	3,680	873
		2m 13s	 12	4,252	626
		1m 49s	 5	1,284	221
		1m 45s	 6	1,455	352
		1m 33s	 6	3,660	549
		1m 22s	 11	1,367	327

Heatmap

Average per Table - How quickly can the class correctly recall each times table? Click a table to focus on those facts.

Avg	10 x	2 x	5 x	3 x	4 x	8 x	6 x	7 x	9 x	11 x	12 x
7.2s	6.5s	8.3s	5.8s	6.4s	5.9s	7.3s	8.0s	7.1s	7.5s	12s	9.6s

Class Average per Fact (Heatmap)

How quickly can the class correctly recall each fact up to 12x12?

2-12x

2-20x

KSJ Jaguars heatmap as of 10 Feb 2023



	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

The colours on this page relate to the speed shown in this table:



data

0 - 1s

1 - 2s

2 - 3s

3 - 4s

4 - 5s

5 - 6s

6 - 7s

7 - 8s

8 - 9s

9 - 10s

> 10s

How to build confidence

- If your child is not fluent at their times tables, play the non-timed games:

- Garage

- When your child is fluent at their times tables, play the timed games:

- Soundcheck - it's identical to the MTC the children will take in June.

- Studio

- Festival

- Arena

When working with your child

01

Keep the mood light and positive

02

Give your child time to process their thoughts (don't jump in too early to help)

03

If they're not performing to your expectation, remember that they may be feeling under pressure

04

Never admit your own failing with Maths!

05

Have fun. Children learn best when calm and relaxed

When your child arrives - Tasks to complete

A large, 3D, red number '1' with a slight shadow, set against a white background.

Let your child show you the games on TTRockstars that they like to play and play along together.
Check the heatmap to show you which tables your child knows, and which they need to learn.

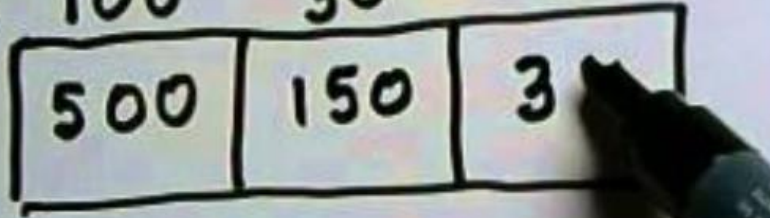
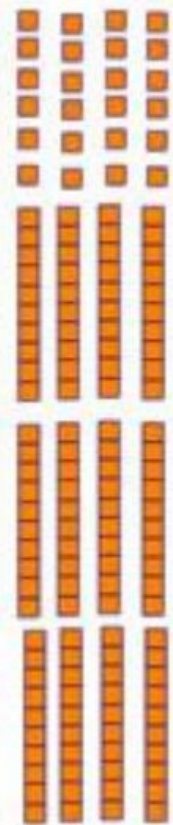
A large, 3D, gold number '2' with a slight shadow, set against a white background.

Complete the Sound Check game in TT Rockstars so you can see how your child would perform in the MTC if they took it now.
Make a note of all the incorrect answers to focus on these tables at home.

Year 4 multiplication methods

$136 \times 5 =$

	x 100	30	6
5	500	150	30






	Expanded	Standard
	$\begin{array}{r} 36 \\ \times 4 \\ \hline 24 \\ 120 \\ \hline 144 \end{array}$	$\begin{array}{r} 36 \\ \times 4 \\ \hline 144 \\ \hline 2 \end{array}$

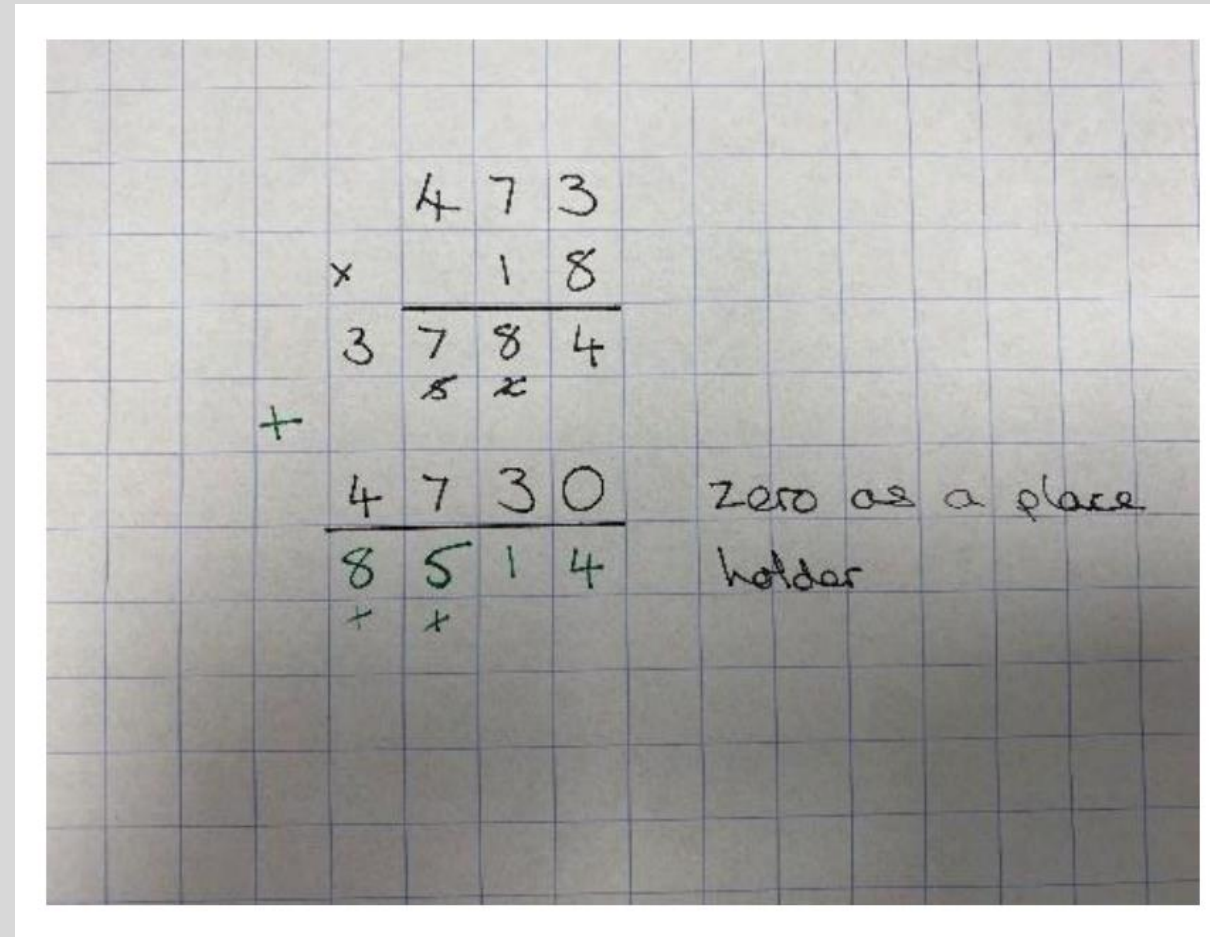
Year 4 multiplication methods

Expanded method should be revisited where necessary. However children should move onto the compact method.

$24 \times 7 = 168$

$\begin{array}{r} 20 \\ \times 7 \\ \hline 140 \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline 28 \end{array}$	$\begin{array}{r} 140 \\ + 28 \\ \hline 168 \end{array}$	\rightarrow	$\begin{array}{r} 24 \\ \times 7 \\ \hline 168 \end{array}$
				
Distributive Law				Short Multiplication

Year 5 multiplication methods

A photograph of a student's handwritten work on grid paper. The student has performed a multiplication problem: 473 multiplied by 18. The work is organized into two parts. The first part shows the multiplication of 473 by 8, resulting in 3784. The second part shows the multiplication of 473 by 10, resulting in 4730, with a note "zero as a place holder" written next to the zero. The two partial products are then added together to get the final result, 8514. There are small 'x' marks under the 8 and 10, and a '+' sign to the left of the addition line.
$$\begin{array}{r} 473 \\ \times 18 \\ \hline 3784 \\ + 4730 \\ \hline 8514 \end{array}$$

zero as a place
holder

Calculation Policies



Mathematics at Katherine Semar Schools

Miss Munro and Mrs Farrant are our Maths leads.



All slides (including videos) and materials from our parent workshops can be found here-

MATHEMATICS FLUENCY POLICY 2024- 2025 INCLUDING NUMBER S...



ADDITION CALCULATION POLICY 2024-2025



SUBTRACTION CALCULATION POLICY 2024-2025



MULTIPLICATION CALCULATION POLICY 2024-2025



DIVISION CALCULATION POLICY 2024-2025



YG MATHS VOCABULARY POLICY



SUBJECT SEF MATHEMATICS



YEAR 3 PARENT WORKSHOP



FLUENCY FACT IDEAS FOR PARENTS



How to help at home

- Together with reading and spellings, make time for TTRockstars or chanting tables each day for a few minutes
- Use long car journeys to your advantage to recite tables (you have a captive audience in a car!)
- Make up silly rhymes to help remember the 'tricky' ones (E.g. I ate and I ate till I was sick on the floor, eight times eight is sixty-four)
- Use the 'Creative ideas' sheet to play some games that require times tables.