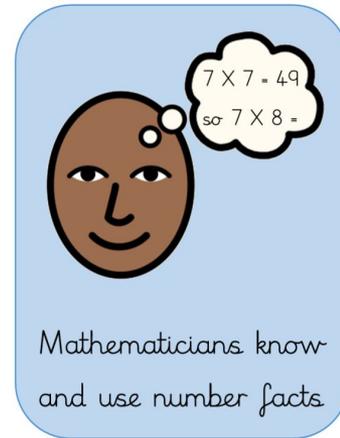




PRIMARY SCHOOL

Year 4 MTC Parent Workshop



Important dates:

Our Year 4 Multiplication Table Check (MTC) will take place within a 3 week period from Monday 5th June.

What is the MTC?

'The MTC is an on-screen check consisting of 25 times tables questions. Your child will answer 3 practice questions before moving on to the official check and will then have 6 seconds to answer each question. On average, the check should take no longer than 5 minutes to complete.'

'The purpose of the check is to determine whether pupils 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 pupils who may need additional support.'

Completed with the class teacher

Why?

“Do children need to learn their tables?’...the point of being fluent in them is to free up the *working memory* when tackling a more interesting and engaging piece of mathematics.”

Askew, M. (2012) Transforming primary mathematics. London: Routledge.

Why learn times tables?

- Memorisation of times tables frees up working memory
- Times tables are needed in order to access higher-order calculations



Working Memory Example:

Holding somebody's address in your head whilst listening to instructions about how to get there.

Why?

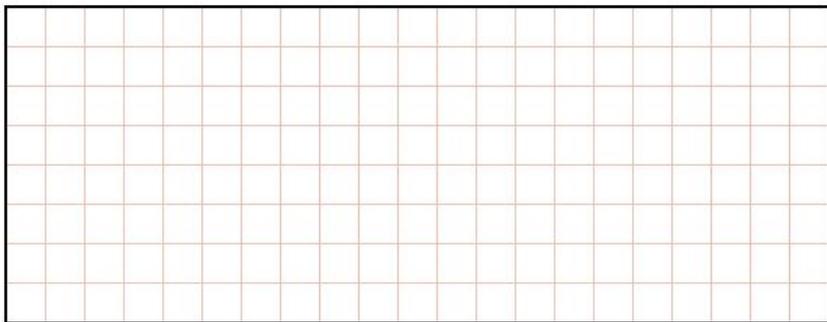
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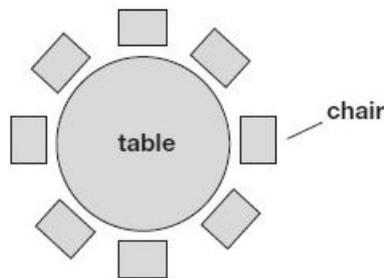
Why learn times tables?

- Times tables are needed in order to access higher-order calculations

= 596×7



One table can seat 8 people.



How many tables are needed to seat 40 people?

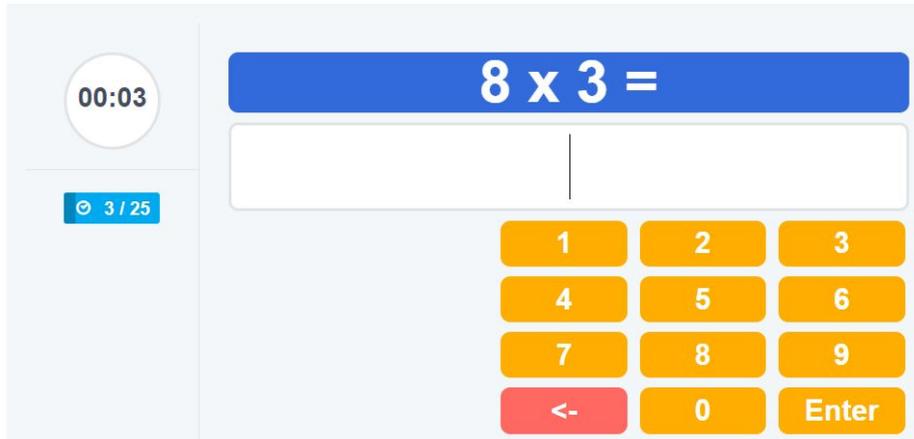
tables

Why?

Why the MTC:

- Studies showing computer-based practice of times tables is more effective
- Less time to answer multiplication questions ensure pupils move from inefficient methods to rapid recall

Multiplication tables check



The screenshot shows a digital interface for a multiplication tables check. On the left, there is a circular timer showing '00:03' and a blue box indicating '3 / 25' questions completed. The main area features a blue header with the equation '8 x 3 ='. Below this is a large white input field with a vertical cursor. At the bottom, there is a numeric keypad with buttons for digits 1-9, 0, a backspace key (<-), and an 'Enter' key.



The purpose of the MTC is to determine whether year 4 pupils can fluently recall their multiplication tables

- As is the case with the Phonics Check, school-level results will be available to selected users including Ofsted.
- National results will be reported by the Department for Education (DfE) to track standards over time.
- There is no expected threshold for the check, but the DfE will report on the percentage of children who received full marks.
- These results will help to inform teacher assessment and future support as necessary

Accessing the check:



There are several access arrangements available for schools to use, and teachers will be able to ensure that these are appropriate for your child prior to the check window in June.

There are, however, some circumstances in which it may not be appropriate for a pupil to take the check. If you have any concerns about your child being able to access the MTC, you should talk to your child's teacher, the school's maths leads (Beth and Naomi) or Holly.

Times Tables in the National Curriculum

'Pupils should be taught to recall multiplication and division facts for multiplication tables up to 12×12 '.

There is an emphasis on the 6, 7, 8, 9 and 12 multiplication tables because these have been determined to be the most difficult multiplication tables.

The 1 multiplication table is not included in the check.

Multiplication Table fluency at Torriano:



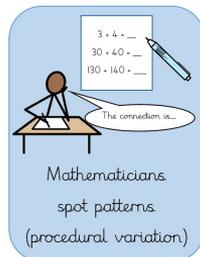
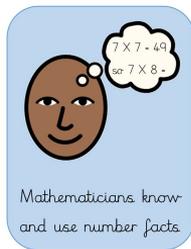
Efficiency,
accuracy
and
flexibility

Y1 - Count in 2, 5, 10

Y2 - 2s, 5s, 10s

Y3 - 4s, 8s, 3s, 6s, 9s and 7s

Y4 - 11s and 12s



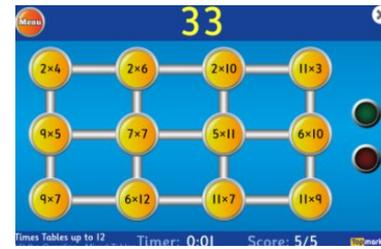
×	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	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

Key: 'new' facts
previously learnt facts
relevant previously learnt facts (commutativity)

2	2	2	2	2	2	2	2	2	2	2	2
4		4		4		4		4		4	

3	3	3	3	3	3	3	3	3	3	3	3
9			9			9			9		

Preparation for Spring 23:



- Baselined in September using MathsFrame practice tool.
 - Identifying gaps and individuals who need extra practice.
- Half-termly assessment - 1:1 with class teacher.
- Daily practice with the technology.
- Times table tutoring with class teachers
- Daily fluency practice - focused on multiplication tables.
- Continued teaching of times tables and strategies.

What can Y4 do at home?

Online Games:

Times Table Rockstar <https://trockstars.com/>

Hit the button <https://www.topmarks.co.uk/maths-games/hit-the-button>

Closest to check itself:

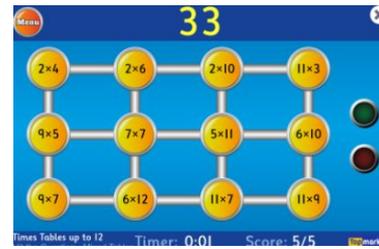
<https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check>

<https://urbrainy.com/mtc/test#>

Times Tables Songs:

<https://www.youtube.com/watch?v=9nX8YlhDDcc>

<https://open.spotify.com/album/1zah8STmfkrnzwoGfkG30#login>



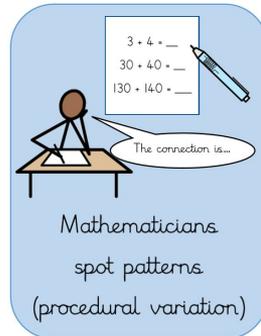
What can Y4 do at home?

Pattern Spotting:

Remind them of the commutativity
(if I know 4×7 then I know 7×4)

Additional practice and confidence
helps to reduce anxiety

Focus on learning one times table -
children will know



X	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

X	1	2	3	4	5	6	7	8	9	10	11	12										
1																						
2																						
3													9			18	21		27		33	36
4																						
5																						
6														36	42		54		66	72		
7															49		63		77	84		
8																						
9																81		99	108			
10																						
11																		121	132			
12																			144			

If I learn my
2, 5, 10

and my

4, 8

I don't need to learn
1

Questions?

Key takeaways:

- 3 week window from 5th June 2023
- Children will be in a small group or 1-1 with their teacher

There will be a second parent workshop 10th Nov 4pm online - please encourage other parents to attend.