



Year 3 & 4

# Multiplication Meeting

Information for parents and carers

# Session Aims

By the end of the session  
you should:

- ★ To know how to support your child in learning their timestables
- ★ Understand what the Year 4 MTC is.
- ★ Know how to support your child prepare for the Year 4 MTC.





## Why are times tables so important?

- Knowing their times tables will give your child confidence in their ability in Maths. We aim for all children to be able to mentally recall their times tables, moving away from counting on their fingers as they become more confident.
- Times tables can help your child to grasp other mathematical concepts, such as fractions, division, ratio and percentages to name a few.
- If a child is confident with their times table skills, then this can reduce the cognitive load when learning a new method.

### Expectations for times tables for each year group:

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 multiplication tables, Including recognising odd and even numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Year 4	Recall and use multiplication and division facts for multiplication tables up to 12x12.
Year 5	Revision of all times tables and division facts up to 12x12.
Year 6	Revision of all times tables and division facts up to 12x12.



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# Ways to support times table knowledge ?

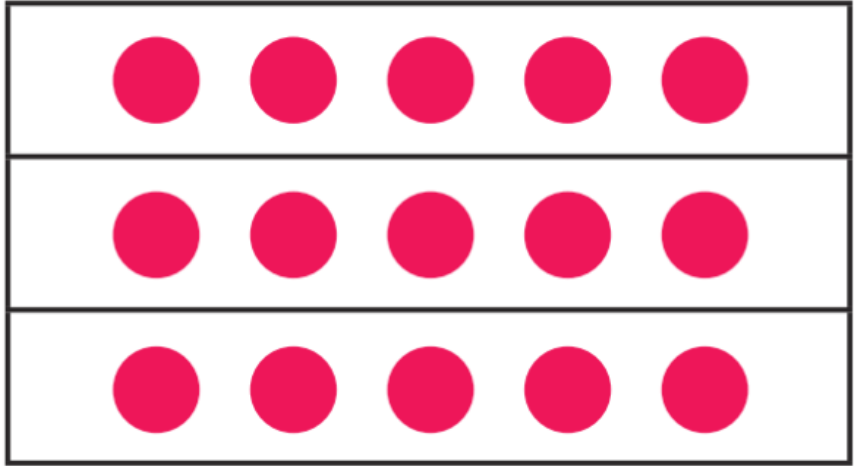
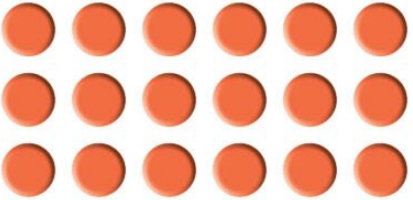
- Count and look for patterns.
- Understand that multiplication is repeated addition.
- Remember that multiplication is commutative.
- Remember that multiplication is the inverse of division.
- Recall and utilise fact families.

Use different representations to represent multiplication, such as:

- Concrete manipulatives such as multilink cubes or counters.
- Create pictorial representations such as arrays.

### Array

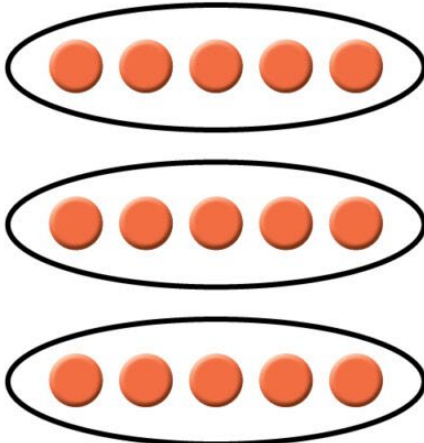
Rows and columns with an equal amount in each.


$$5 \times 3 = 15$$


dividend    divisor    quotient

$$3 \times 6 = 18$$

number of groups    number in each group    number in all



dividend    divisor    quotient

$$18 \div 3 = 6$$

number in all    number of groups    number in each group



## Counting and looking for patterns

Example: Counting in 2s

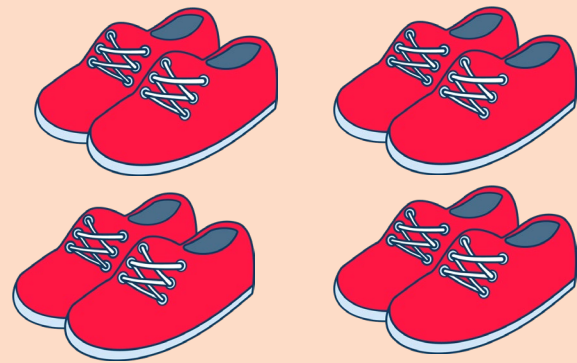
2, 4, 6, 8, 10 ...

- Ensure children have a strong understanding of counting in groups first.
- When children are secure with counting, they can then look for patterns.

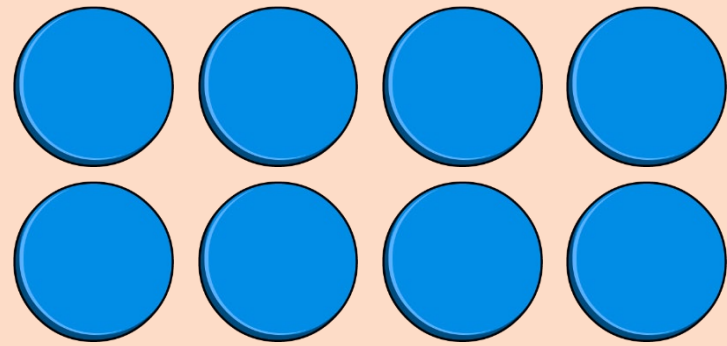


## Repeated addition

Knowing that  $2 \times 4$  is the same as  $2 + 2 + 2 + 2$



$$2 + 2 + 2 + 2 = ?$$

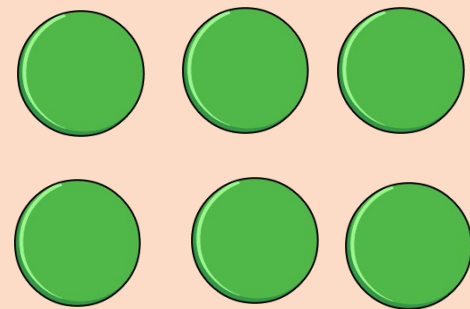


$$2 \times 4 = ?$$

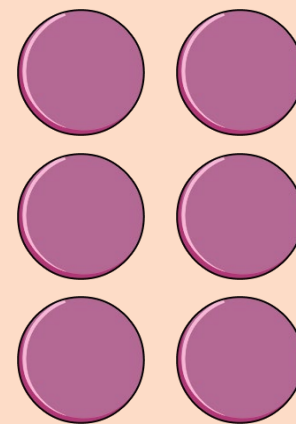
# Multiplication is commutative

$3 \times 2$  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.



3 lots of 2 = 6

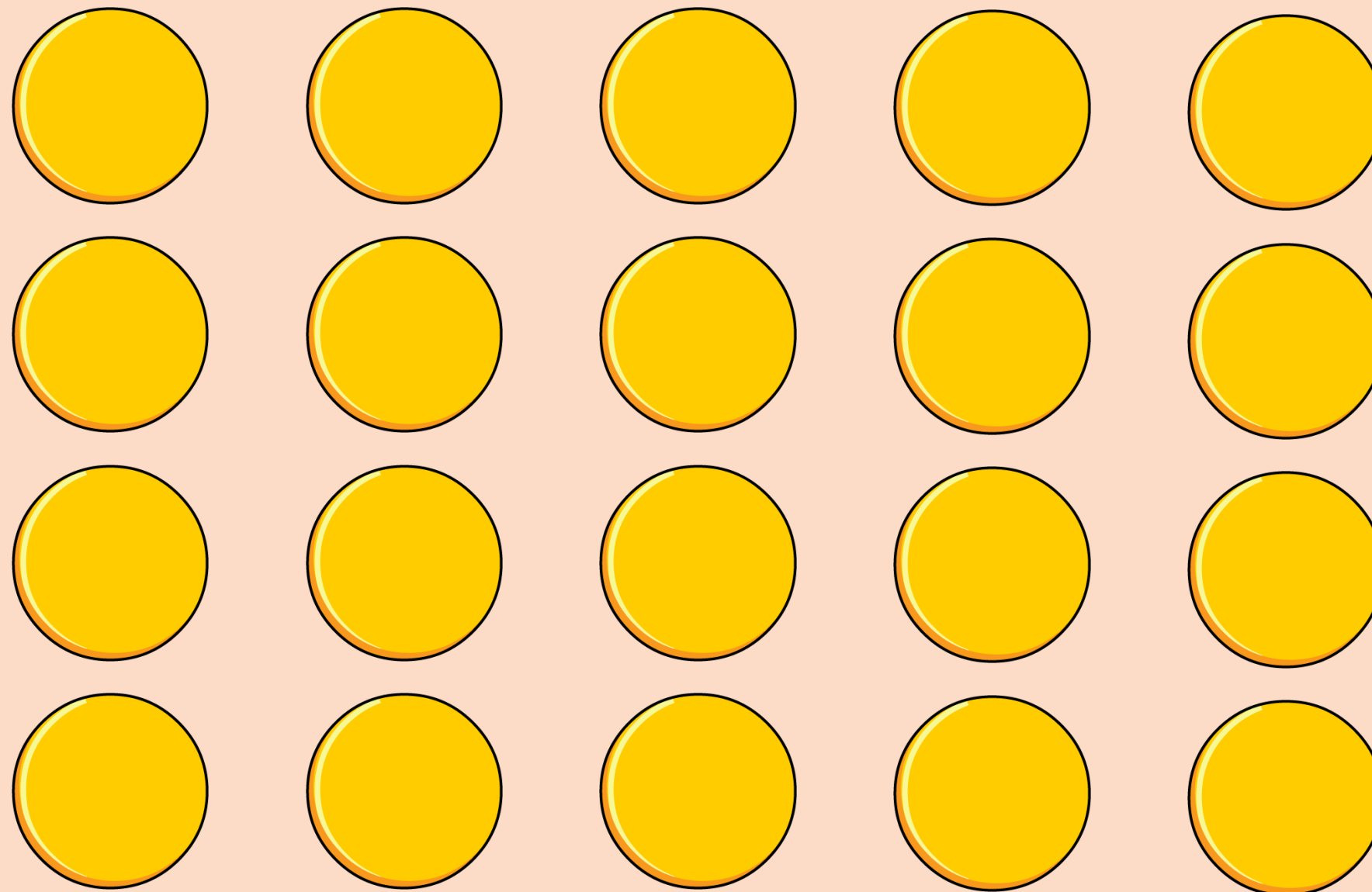


2 lots of 3 = 6

## Multiplication is the inverse of division

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

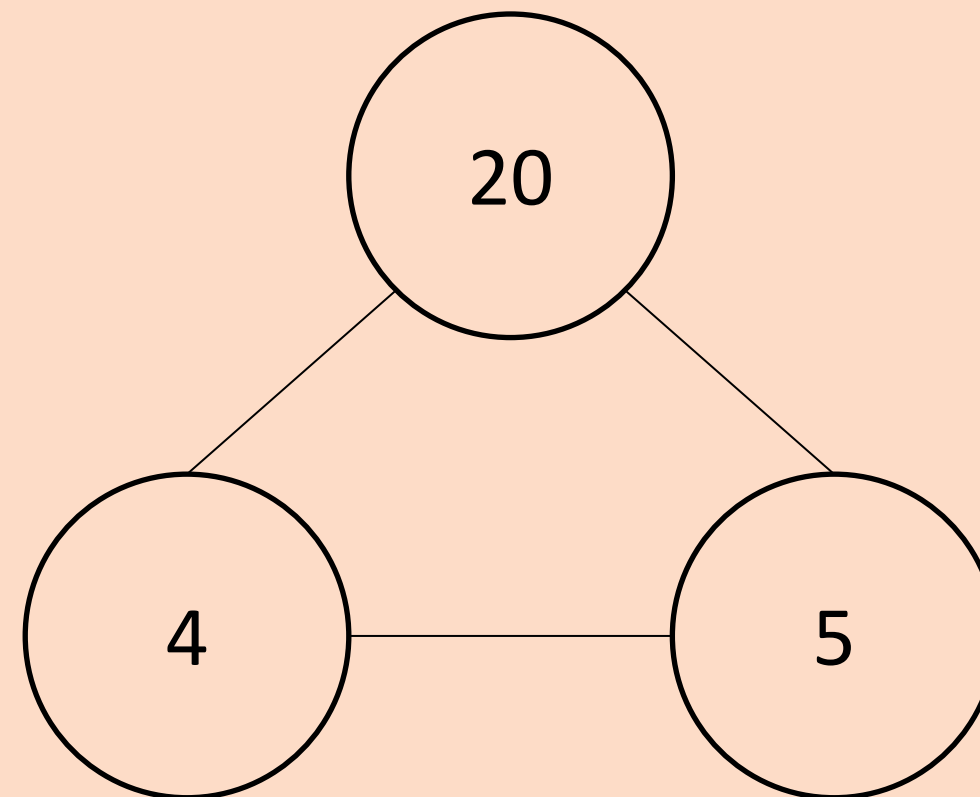
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



## Fact 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.



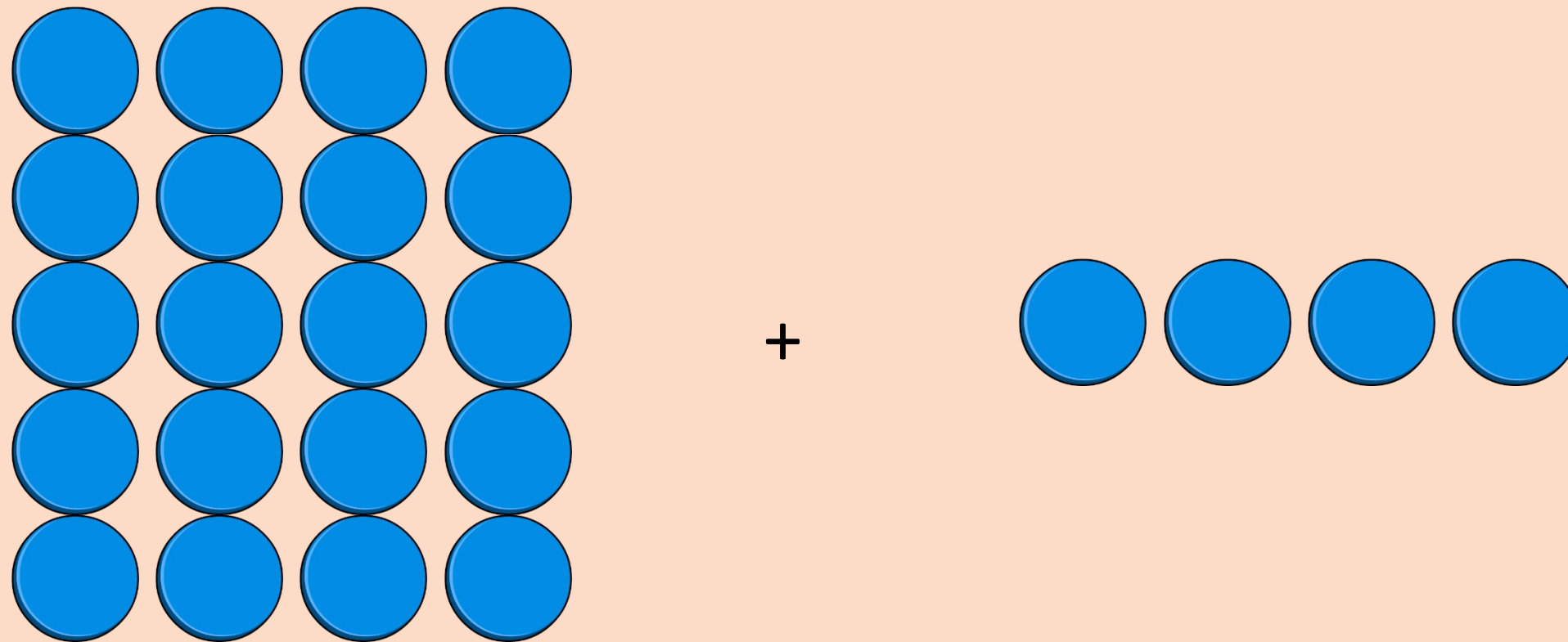
## Using known facts

$$4 \times 6 = ?$$

$$\text{I know } 4 \times 5 = 20$$

$$\text{Therefore, } 20 + 4 = 24$$

By using known facts from 'easier' times tables, children should be able to find answers with increasing speed.



# What can you do at home?

## Times Table Rockstars

The school has invested into TTRS to make practicing times tables more fun.

Using TTRS for ~10 minutes a day has proven to quickly improve a child's recall and pace for their times tables.

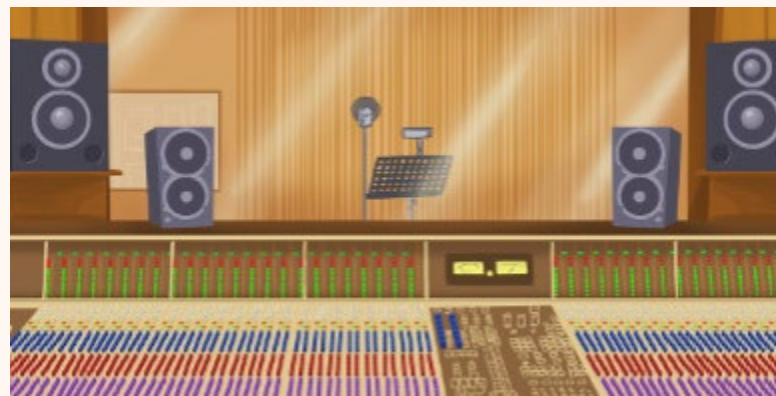
### Sound Check

25 questions – 6 seconds per question



### Studio

The faster you answer, the higher "status" you earn



### Garage

Generates a heatmap to show which TTs to focus on

	10	2	5	3	4	8	6	7	9	11	12
10	10x10	10x2	10x5	10x3	10x4	10x8	10x6	10x7	10x9	10x11	10x12
2	2x10	2x2	2x5	2x3	2x4	2x8	2x6	2x7	2x9	2x11	2x12
5	5x10	5x2	5x5	5x3	5x4	5x8	5x6	5x7	5x9	5x11	5x12
3	3x10	3x2	3x5	3x3	3x4	3x8	3x6	3x7	3x9	3x11	3x12
4	4x10	4x2	4x5	4x3	4x4	4x8	4x6	4x7	4x9	4x11	4x12
8	8x10	8x2	8x5	8x3	8x4	8x8	8x6	8x7	8x9	8x11	8x12
6	6x10	6x2	6x5	6x3	6x4	6x8	6x6	6x7	6x9	6x11	6x12
7	7x10	7x2	7x5	7x3	7x4	7x8	7x6	7x7	7x9	7x11	7x12
9	9x10	9x2	9x5	9x3	9x4	9x8	9x6	9x7	9x9	9x11	9x12
11	11x10	11x2	11x5	11x3	11x4	11x8	11x6	11x7	11x9	11x11	11x12
12	12x10	12x2	12x5	12x3	12x4	12x8	12x6	12x7	12x9	12x11	12x12
NO DATA	0-1s	1-2s	2-3s	3-4s	4-5s	5-6s	6-7s	7-8s	8-9s	9-10s	>10s

# What can you do at home?

## Regular Verbal Practice

Verbally reciting times table sequences and testing your child with verbal questions can support long term memorisation.

## Times Table Wall Charts

Putting up or creating posters that display times tables allows children to regularly see and remind themselves of times table facts

## Pattern spotting

Finding quick-tricks and patterns to support learning some of the trickier times tables

Such as...

Find 8x by double, double, double

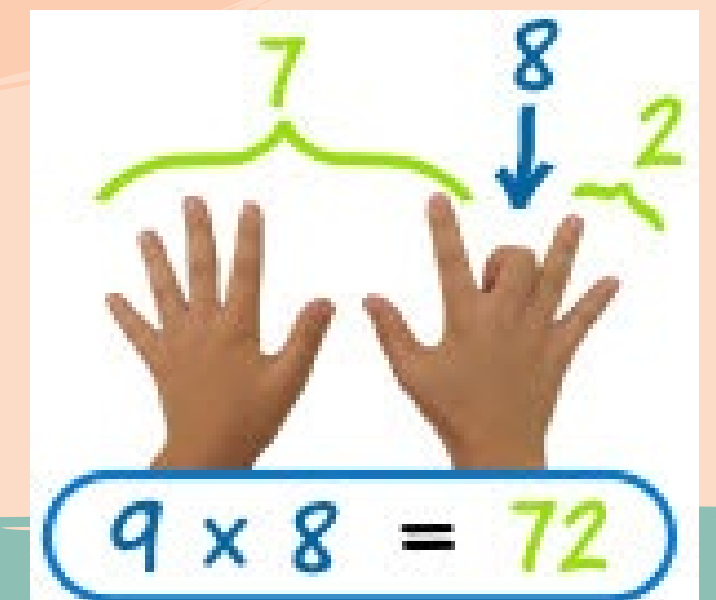
Find the 9x table by multiplying by 10, then subtracting the multiplier.

$$“5, 6, 7, 8” \rightarrow 56 = 7 \times 8$$

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

7x table	8x table	9x table	10x table	11x table	12x table
0 x 7 = 0	0 x 8 = 0	0 x 9 = 0	0 x 10 = 0	0 x 11 = 0	0 x 12 = 0
1 x 7 = 7	1 x 8 = 8	1 x 9 = 9	1 x 10 = 10	1 x 11 = 11	1 x 12 = 12
2 x 7 = 14	2 x 8 = 16	2 x 9 = 18	2 x 10 = 20	2 x 11 = 22	2 x 12 = 24
3 x 7 = 21	3 x 8 = 24	3 x 9 = 27	3 x 10 = 30	3 x 11 = 33	3 x 12 = 36
4 x 7 = 28	4 x 8 = 32	4 x 9 = 36	4 x 10 = 40	4 x 11 = 44	4 x 12 = 48



# What is the MTC?

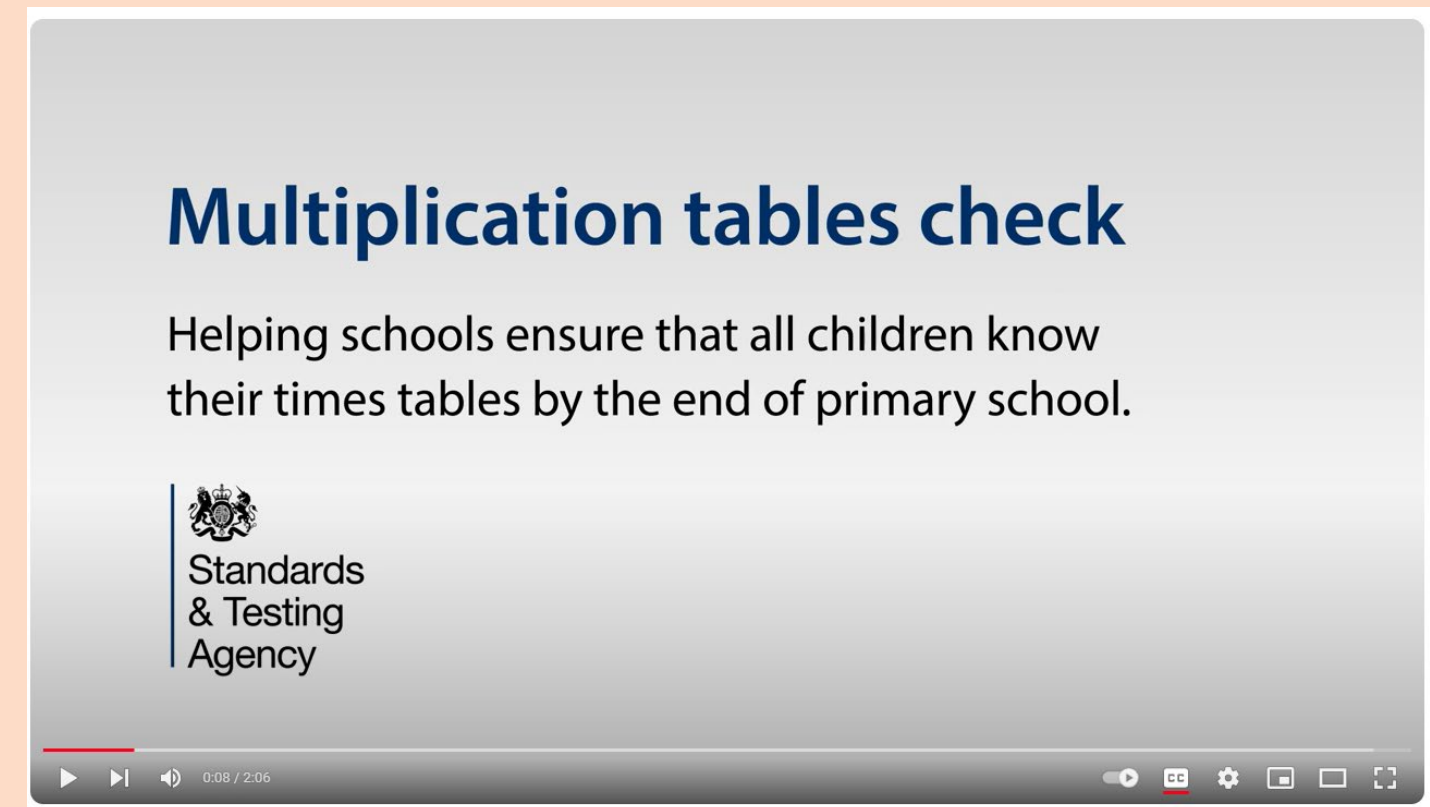
The Multiplication Tables Check is an on -screen check consisting of 25 times table questions.

Your child will be able to answer 3 practice questions before the actual check begins.

They will be given **6 seconds** to answer each question, with a 3 second rest between each question. As such, the test is usually completed in less than 5 minutes.

Quick recall of times tables, rather than working them out, is **essential** .

Takes place between Monday June 1<sup>st</sup> and Friday June 12<sup>th</sup> .



[Multiplication tables check: information video](#)

# Why do Year 4s do the MTC?

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.

Much of the curriculum in Year 5 and 6 is designed to build on what they already know, such as having a quick recall of their times table facts.

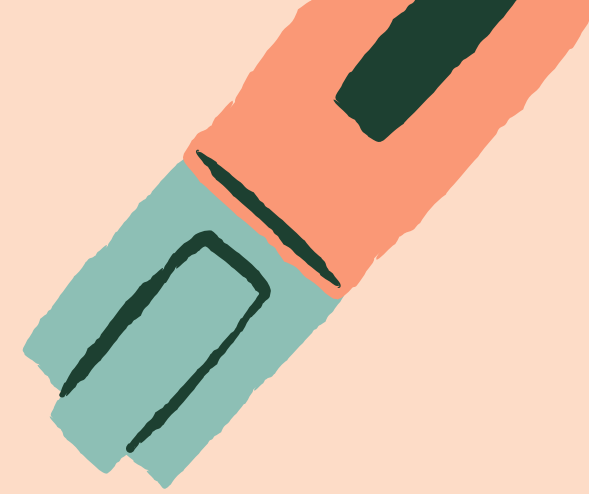
It can also be useful to teachers to identify if your child may need additional support in the future.

## National Curriculum:

Year Group	Multiplication Curriculum
Year 1	Counting forwards and backwards in 2s and 10s
Year 2	Learning about the concept of multiplication along with 2x, 5x and 10x tables
Year 3	3x, 4x and 8x tables
Year 4	<b>All times tables up to 12x</b>
Year 5 & 6	Application of times tables to solve complex problems, e.g. areas of compound shapes, converting improper fractions and calculating ratios.



# Accessibility



The on-screen design of the check means that it can be made accessible to every child.

The check has been designed to be inclusive and accessible to as many children as possible, including those with Special Educational Needs and Disabilities or English as an Additional Language.

Teachers are able to adjust the test to suit such additional needs.

e.g. changing the font size, enabling an audio version and teachers can input on their behalf. These judgements will be made by the school.

Additional time to answer each question is not allowed – set to 6 seconds per questions for every child.


# At school

## Practise Area

In Year 4, times tables are a key focus and are regularly practiced under timed conditions using in class tests and MTC style simulation. We use [timestables.co.uk](https://www.timestables.co.uk) which can also be accessed from home.

This is used to give children the chance to familiarise themselves with what the check will look like, and how to enter answers.

This is also similar to the TTRS game: Soundcheck and the Multiplication Check on MathsFrame, which is also frequently used at school.

A stylized illustration on the right side of the page. It shows a hand holding a pencil, with the pencil tip pointing towards a calculator. The calculator is orange and has several buttons. The background is a teal color.

Children currently practice their times tables daily in schooltime.

# Strategy

## Practice Area

Our school will practice on PCs to complete the MTC with, so children will need to type in their answers on a number pad that is on the right-hand side of the keyboard).

Children can be at risk of typing in an answer too quickly and making a mistake – as such we encourage each child to know the answer before entering it.

Children currently practice daily in school time.



# Online support

- Times Tables Rockstars

<https://play.ttrockstars.com/auth/school/teacher>

- Hit the Button

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

- Multiplication Tables Check – this website mirrors the check the children will be receiving at the end of Year 4.

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

- Times Tables

<https://www.timestables.co.uk/>



# Results

How will the results be used?

Schools are given access to all their pupils' results, to allow them to identify pupils that need additional support.


Will I find out my child's score?

Yes – parents will be provided with their child's score alongside their end of year report card.

What is the pass mark?

There is no national pass mark for the check – we strive to support every child in achieving 100%.

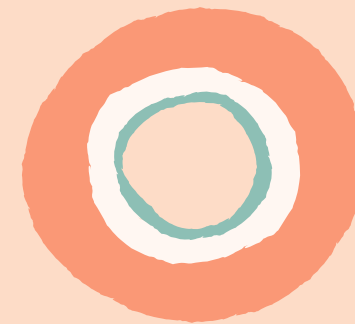
There is a Trust pass mark (2024-5 - 22 and above)



The MTC is purposefully called a “check” – it is just an opportunity to see how your child is getting on.

We take care to not put unnecessary pressure on children and their results.

As long as your child does the best they can, it is all we ask of them!





Thank you  
for your  
time

If you have any questions, please  
liaise with your child's class teacher

This PowerPoint will be made  
available on the school website, and  
further information can be found on  
the government website.