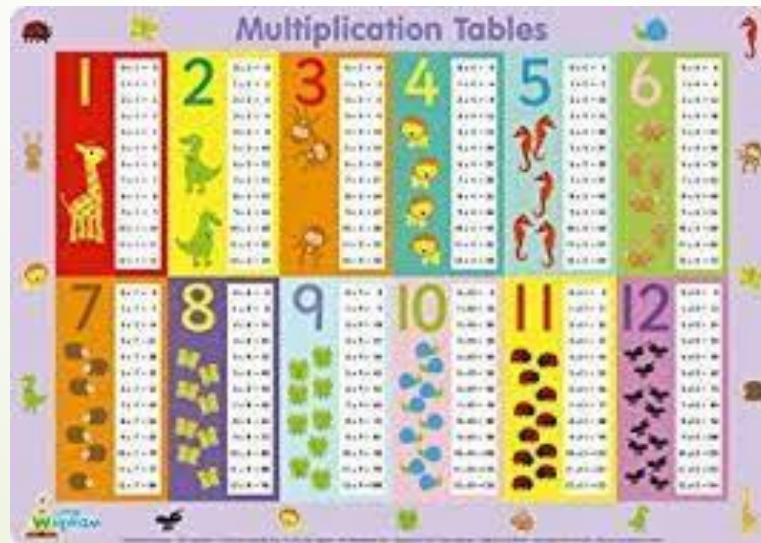


# Parent's and Carer's Information Meeting

## Multiplication Tables Check

Tuesday 5<sup>th</sup> March



## Aims

- To achieve a stronger understanding of what the Multiplication Tables Check (MTC) is and what the expectations are
- 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 and websites you can use with your child at home

## **Times tables expectations prior to the introduction of the Multiplication Tables Check**

Since 2014, Primary school children have been expected to know all their times tables up to  $12 \times 12$  by the end of Year 4

Not formally tested on them, other than through multiplication questions in the Year 6 Maths SATS examinations at the end of KS2.



**What is the purpose of the multiplication check?**

The purpose of the MTC is to determine whether Year 4 pupils can **fluently** recall their multiplication tables and are meeting the expected standard for their year group before moving to Upper Key Stage 2 (Year 5 and Year 6)

**‘By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work’.**

It also helps identify children who may need additional support, so they can access the demands of the Y5 and Y6 maths curriculum with success.



# When will the Multiplication Tables Check be administered?

It will be taken by children in Year 4, in the summer term (Monday 3<sup>rd</sup> June-Friday 14<sup>th</sup> June). Schools will decide which days to administer the check.

Teachers will have the flexibility to administer the check to individual pupils, small groups or a whole class at the same time.





## How will the Multiplication Tables Check be administered?

Children will be tested using an on-screen check (on a computer or a tablet), where they will have to answer multiplication questions against the clock.

Calculators and wall displays that could provide children with answers will be removed from the room the MTC is taking place in.

It will be automatically scored, and results will be available to schools once the assessment window closes at the end of the 3 week assessment period.

# How will the Multiplication Tables Check be administered?

**Children will have 6 seconds to answer each question in a series of 25 questions.**

**There will be a 3 second pause between each question.**

This allows pupils the time required to demonstrate their recall of multiplication tables, whilst limiting pupils' ability to work out answers to the questions.

Each question will be worth one mark and be presented to the child in this format:

$$\_ \times \_ = \_\_\_\_\_$$

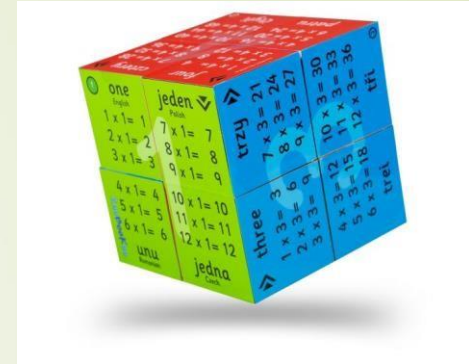
The test will last no longer than 5 minutes and is similar to other tests already used.

## The Questions

Each pupil will be assigned a random set of questions

Children will only face multiplication statements in the check (not related division facts).

Pupils will not see their individual results when they complete the check.





There will be repeated questions across different checks each year, but no more than 30% of questions will be repeated in any two checks.

## During the check

There will always be questions from the 3, 4, 5, 6, 7, 8, 9, 11 and 12 multiplication tables in each check.

There will be no questions from the 1 times table (i.e  $1 \times 8$  or  $8 \times 1$ ).


The 6, 7, 8, 9 and 12 times tables are more likely to be asked.

There will only be a maximum of 7 questions from the 2, 5 and 10 times tables.

Reversal of questions will not feature in the same check.

**5.2.1 Table 1 – Multiplication table limits in the MTC**

<b>Multiplication Table</b>	<b>Minimum number of items in each form</b>	<b>Maximum number of items in each form</b>
<b>1</b>	Not applicable	Not applicable
<b>2</b>	0	2
<b>3</b>	1	3
<b>4</b>	1	3
<b>5</b>	1	3
<b>6</b>	2	4
<b>7</b>	2	4
<b>8</b>	2	4
<b>9</b>	2	4
<b>10</b>	0	2
<b>11</b>	1	3
<b>12</b>	2	4



They are classifying the multiplication tables by the first number in the question. For example,  $8 \times 3$  would fall within the 8 times table.

## Questions more likely to appear

The following 11 multiplication questions are more likely to be asked:

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

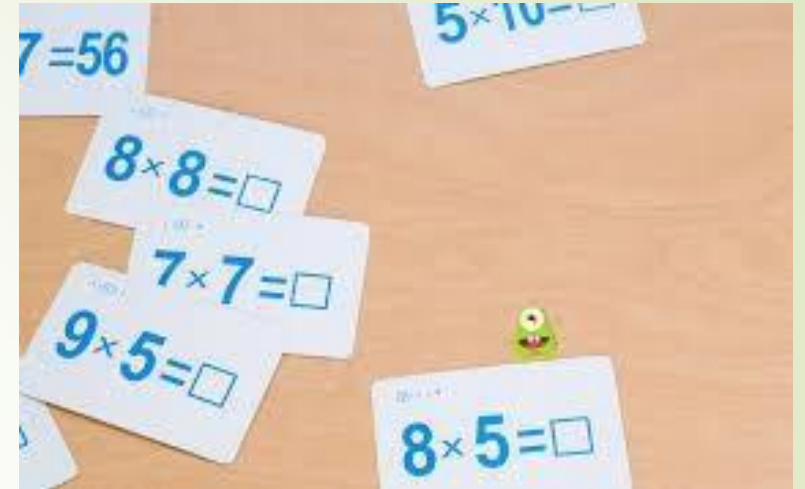
- $8 \times 9, 8 \times 12$

- $12 \times 12$

## Before the check

Children can practise before taking the check

There will be a 'try it out' area the children can use to become familiar with the timings and layout of the check.





The image shows a digital math quiz interface. At the top left, a circular timer displays "00:06". Below the timer are three buttons: a green checkmark button labeled "0", a red 'X' button labeled "0", and a blue button with a percentage sign labeled "0%". Each button has "4 / 25" written below it. The main display area features a blue header with the equation  $3 \times 12 =$ . Below the header is a white input field. To the right of the input field is a calculator keypad with orange buttons for digits 1-9, 0, and a red left arrow button. Below the keypad is a blue "Answer" button.

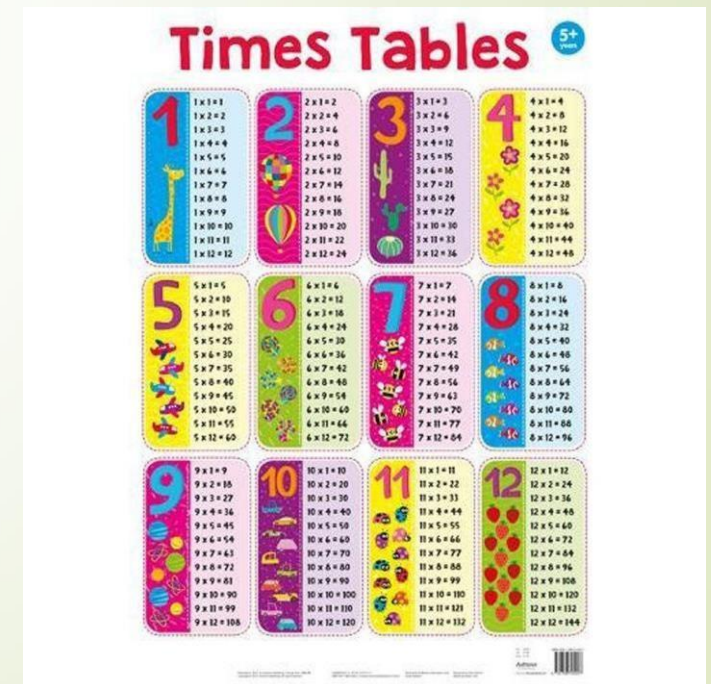
# Preparations do not begin in Year 4

Year 1 – Count in multiples of 2, 5 and 10

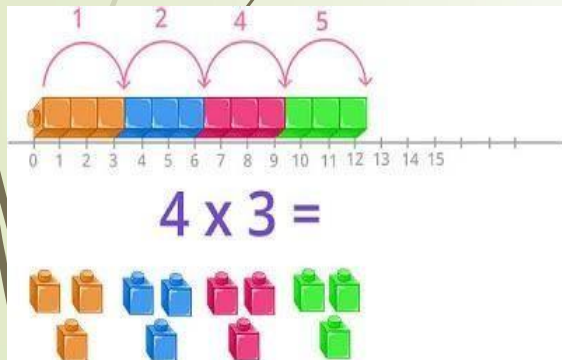
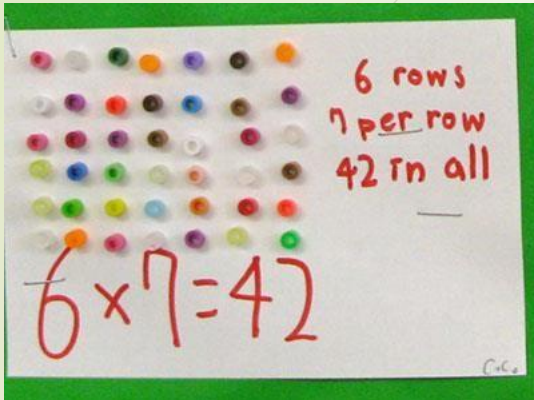
Year 2 – Learn their x2, x5 and x 10  
Count in multiples of 3

Year 3 – Learn their x3, x4 and x 8

Year 4 – x6, x7, x9, x11, x12



# How we teach Times tables at St. Paul's



Teaching times tables facts first:

- Counting and looking for patterns
- Repeated addition
- Multiplication is commutative
- Multiplication is the inverse of division
- Number families
- Use of different representations
- Concrete manipulatives such as counters or multilink cubes
- Pictorial representations such as arrays

# Counting and looking for patterns

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.

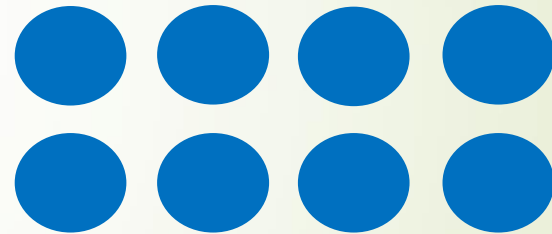




# Repeated addition

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

Sam	Chen
	
	
Krishna	Alex
	
	
$2 + 2 + 2 + 2 = ?$	



# Multiplication is commutative

3 x 2 is the same as 2 x 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 x 3

3 lots of 2 = 6



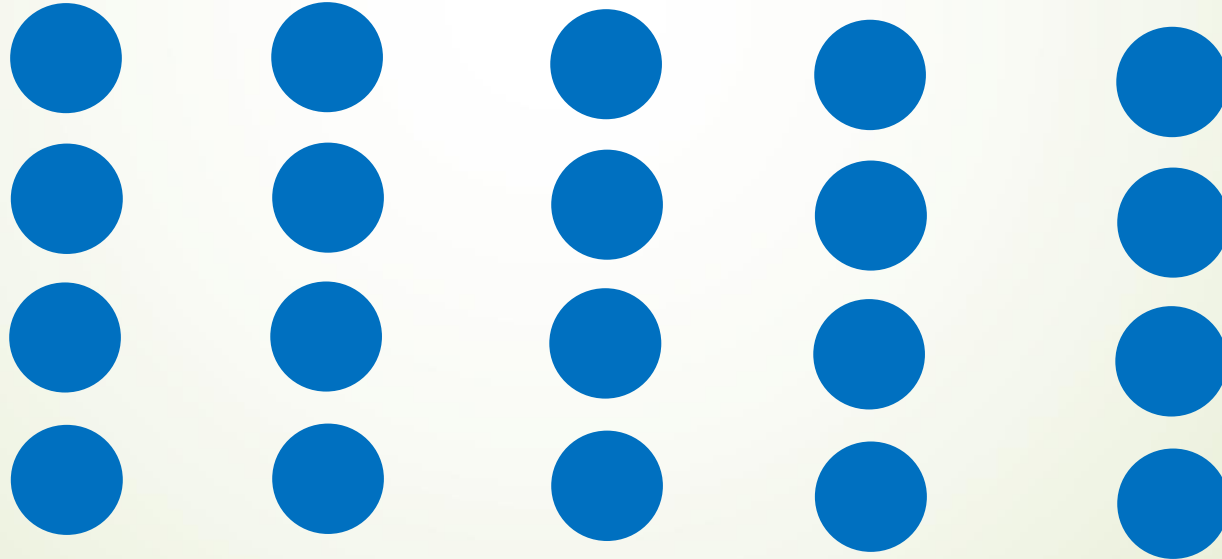
2 lots of 3 = 6



# Multiplication is the inverse of division

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

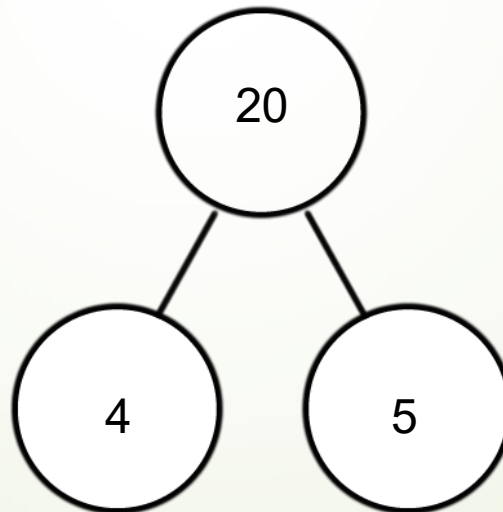
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



## 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.



## Using known facts

$$7 \times 12 = ?$$

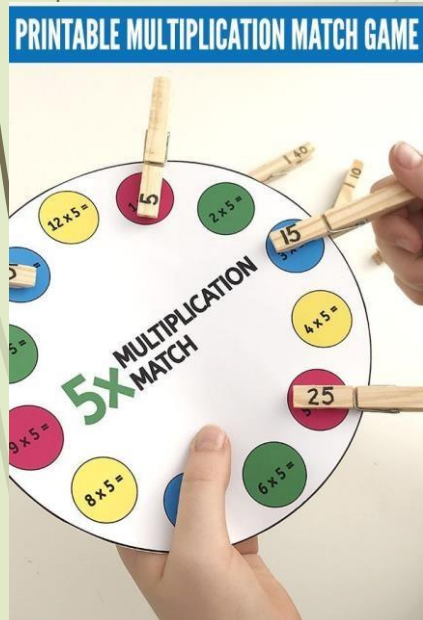
I know  $7 \times 11 = 77$

Therefore,  $77 + 7 = 84$

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

# How can I support my child?

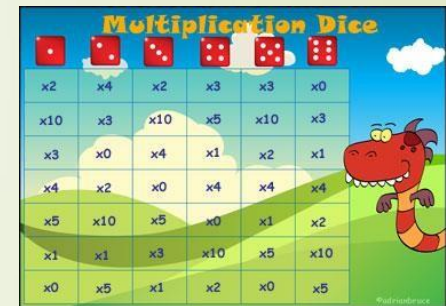
- Make times tables fun;



- Play verbal times tables games
- Listen to and learn times tables songs
- Play online maths games
- Remember – If your child is practising regularly at home, they are practising for the benefit of their wider math's education.

TIMES TABLES ROCKSTARS

<https://ttrockstars.com/login>



- At home and in-school
- Get your child to practise daily for 10-15 minutes



# Useful websites to practise for the MTC

<https://www.timestables.co.uk/multiplication-tables-check/>

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







## What is the pass mark for the test?

The DfE have not issued an official "pass mark".

Watch the video for additional information

<https://youtu.be/GhAJMJUsAac>

## How will the MTC data be used?

- School-level results and individual pupil results will be made available to schools. This will allow schools to provide additional support to pupils who require it.
- As is the case with the phonics check (KS1), school-level results will be available to selected users including Ofsted. They will not be published in a performance table.
- National and local authority results will be reported by the Department for Education (DfE) to track standards over time.
- Your child's score (out of 25) will be shared with you in their end of year report.



# **Remember this about the multiplication tables check**

**The check will focus on what they know about times tables**

It won't reflect their understanding of wider mathematical topics.

**The check is only 5 minutes long**

For most children, the check will last for a maximum of 5 minutes. When they have finished, they will not need to repeat the check, regardless of their final score.

## Useful Websites

National Curriculum

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/335158/primary\\_national\\_curriculum - mathematics 220714.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/primary_national_curriculum_-_mathematics_220714.pdf)

Department of Education (DfE )

<https://www.gov.uk/guidance/multiplication-tables-check-development-process>

## Useful Websites

- MATHS GAMES [HTTP://WWW.MATHS-GAMES.ORG/TIMES-TABLES-GAMES.HTML](http://www.maths-games.org/times-tables-games.html)
- COOL MATHS [HTTPS://WWW.COOLMATHGAMES.COM/](https://www.coolmathgames.com/)
- IXL [HTTPS://UK.IXL.COM/](https://uk.ixl.com/)



•TIMES TABLES ROCK STARS [HTTPS://TTROCKSTARS.COM/](https://ttrockstars.com/)

•TOPMARKS [HTTPS://WWW.TOPMARKS.CO.UK/](https://www.topmarks.co.uk/)

.HIT THE BUTTON

•[DFE VIDEO - HTTPS://YOUTU.BE/GHAJMJUSAAC](https://youtu.be/GHAJMJUSAAC)

# Questions?

Thank you very  
much for  
taking  
the time  
to  
attend.

