

Year 4 Multiplication Tables Check 2023 Presentation for Parents, Carers & Guardians

# Important information about multiplication tables check (MTC)

- The MTC determines if Year 4 children can fluently recall their multiplication tables.
- They are designed to help schools identify which children require more support to learn their times tables.
- There is no 'pass' rate or threshold which means that, unlike the Phonics Screening Check, children will not be expected to re-sit the check.
- The Department for Education (DfE) will create a report about the overall results across all schools in England, not individual schools.



### When the check will take place

- There will be a 3 week window from Monday 6<sup>th</sup> June to Friday 24<sup>th</sup> June 2022 for schools to administer the check.
- There is no set day to administer the check and children are not expected to take the check at the same time.
- All eligible Year 4 children in England will be required to take the check.



#### How the check is carried out

- The check will be fully digital.
- Answers will be entered using a keyboard, by pressing digits using a mouse or using an on-screen number pad.
- Usually, the check will take less than 5 minutes for each child.
- The children will have 6 seconds from the time the question appears to input their answer.
- There will be a total of 25 questions with a 3 second pause in-between questions.
- There will be 3 practice questions before the check begins.



### The check questions

- Each child will be randomly assigned a set of questions
- There will only be multiplication questions in the check, not division facts.
- The 6, 7, 8, 9 and 12 times tables are more likely to be asked.
- Reversal of questions (e.g. 8 x 6 and 6 x 8) will not be asked in the same check.
- Children will not see their individual results when they complete the check.



## More information about the questions

The Standards and Testing Agency (STA) state that they are classifying the multiplication tables by the first number in the question. For example, 8 x 3 would fall within the 8 times table.

5.2.1 Table 1 - Multiplication table limits in the MTC

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



# When does my child learn each times table

In England, children will be expected to know the following in each year at primary school:

- Year 1: count in multiples of 2, 5 and 10.
- Year 2: be able to remember and use multiplication and division facts for the 2, 5 and
   10 multiplication tables, including recognising odd and even numbers.
- Year 3: be able to remember and use multiplication and division facts for the 3, 4 and
   8 multiplication tables, including recognising odd and even numbers.
- Year 4: be able to remember and use multiplication and division facts for the multiplication tables up to 12 x 12.
- Year 5: revision of all multiplication and division facts for the multiplication tables up to 12 x 12.
- Year 6: revision of all multiplication and division facts for the multiplication tables up to 12 x 12.



### 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 number families.

Use different representations to represent multiplication, such as:

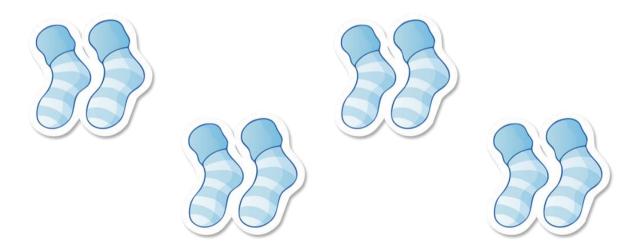
- Concrete manipulatives suck as multilink cubes or counters.
- Create pictorial representations such as arrays.



# Counting and looking for patterns.

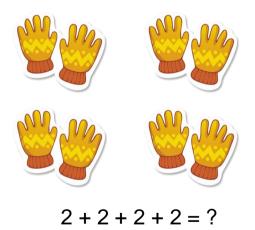
Example: Counting in 2s 2, 4, 6, 8, 10...

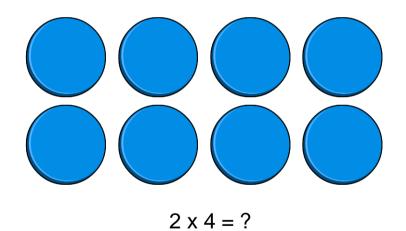
- Ensure children have a strong understanding of counting in groups first.
- When children are secure with counting, they can then look for patterns.



# Repeated addition

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



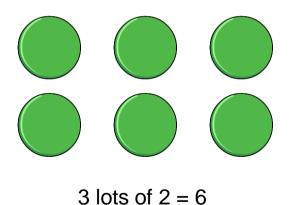


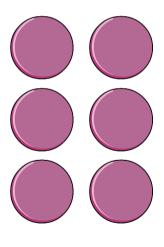


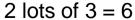
# Multiplication is commutative

#### 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.





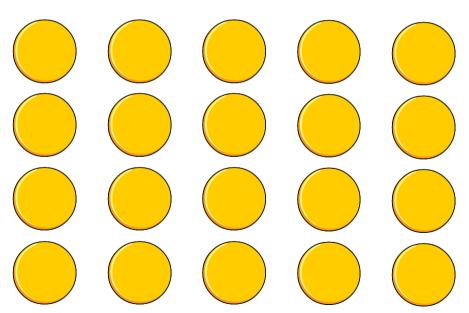




# Multiplication is the inverse of division

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

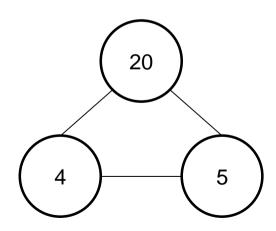
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



#### 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.

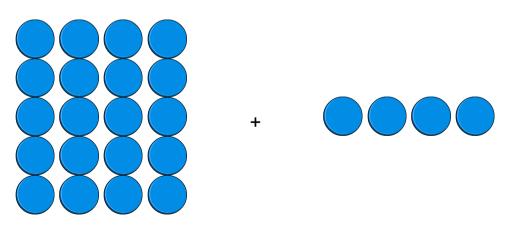




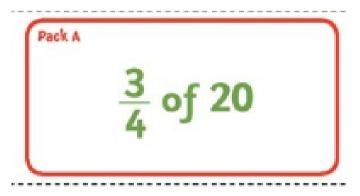
# Using known facts

$$4 \times 6 = ?$$
I know  $4 \times 5 = 20$ 
Therefore,  $20 + 4 = 24$ 

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



Knowing times tables helps the children to work out more complex problems in maths.



### How best to prepare your child for the check

- Remind them that the check should last no more than 5 minutes.
- If you want to go over times tables, make them fun.
   Games to try:
- Climb the stairs counting in multiples
- Play time tables games verbally.
- Listen and sing along to times tables songs.
- Take it in turns to say times tables in funny voices.
- Play maths games online <a href="https://ttrockstars.com">https://ttrockstars.com</a>, <a href="https://www.topmarks.co.uk/maths-games/hit-the-button">www.mathsframe.co.uk</a> <a href="https://www.topmarks.co.uk/maths-games/hit-the-button">https://www.topmarks.co.uk/maths-games/hit-the-button</a>
- ▶ BBC supermovers <a href="https://www.bbc.co.uk/teach/supermovers/times-table-collection/z4vv6v4">https://www.bbc.co.uk/teach/supermovers/times-table-collection/z4vv6v4</a>



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