# Year 4 Multiplication Tables Check Information 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 deigned 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 (2023 data below)

# Average attainment score **20.2**

an increase of 0.4 points since 2022

Percentage of eligible pupils scored 25 marks 29% This is the most common mark (full marks). When the check will take place

There will be a 2 week window from Monday 2<sup>nd</sup> June to Friday 13<sup>th</sup> June 2025 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.

<u>https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check</u> gives an example showing how quick the questions are/ types of questions.

Specific arrangements for the check

Some children will be eligible for specific arrangements:

- Colour contrast;
- Font size adjustment;
- 'Next' button (alternative to 3-second pause);
- Removing on-screen number pad;
- An adult to input answers;
- Audio version;
- Audible time alert.

#### 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.

There won't be questions from the 1 times tables (although they might be included in the 3 practice questions).

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

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. The table shows the minimum/ maximum

number of questions from each times table that will be asked.

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	

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

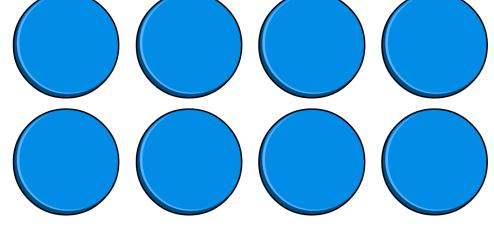
Ensure children have a strong understanding of counting in groups first, use physical objects (shoes, socks, hands etc) before moving on to counters. When children are secure with counting, they can then look for patterns.

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

#### **Repeated Addition**

Children need experience of using concrete manipulatives such as counters or multilink cubes and pictorial representations of objects, forming arrays.





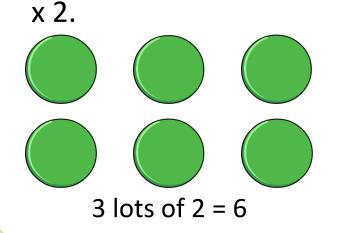
2 x 4 = ?

2 + 2 + 2 + 2 = ?

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

#### Multiplication is Commutative

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. Children build on their existing understanding using **arrays**, turning the arrays around to show that you now have 2 groups of 3 and they will still total 6. This can then be linked to recalling multiplication facts, e.g. if they know their 2 times table as facts but not their 3 times table, they can use 2 x 3 to work out 3



 $3 \times 2$  is the same as  $2 \times 3$ 

2 lots of 3 = 6

Multiplication is the Inverse of Division

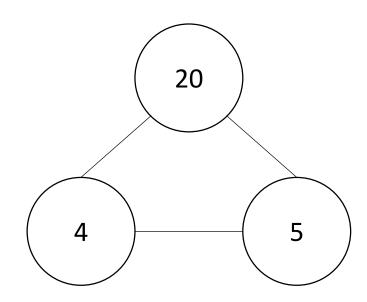
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division. Even though division is not tested in the MTC, it is important that pupils have a strong understanding of the connection between multiplication and division.

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

#### **Number Families**

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.

4 x 5 = 20, 5 x 4 = 20, 20 ÷ 5 = 4, 20 ÷ 4 = 5

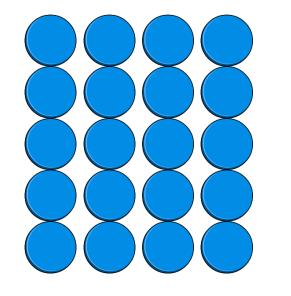


#### Using Known Facts

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

4 x 6 = ? I know 4 x 5 = 20 Therefore, 20 + 4 = 24

+



#### **Teaching Facts in School**

- Progression of tables
- Focusing on 'new facts' and using facts that have already been learned
- 'Fact a day'

Table Fact	Draw it (array/area)			
3 x 4 = 12	3			
Language	Repeated Addition	Fractions	Applied Facts (making connections)	
3 <b>'groups of'</b> 4 equals 12	4 + 4 + 4 = 3 x 4 = 12 3 + 3 + 3 + 3 = 4 x 3 = 12	<sup>1</sup> / <sub>3</sub> of 12 = 4 ¼ of 12 = 3	30 x 4 = 120	
		Using Derived Facts	Word Problems	
Commutative Property	Division Facts	2 x 4 + 4 4 x 4 - 4	Pencils come in packs of 4. I have 3 packs. How many pencils altogether?	
$3 \times 4 = 4 \times 3$ $12 \div 3 = 4$ $12 \div 4 = 3$				

#### 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.
  Times tables chanting: "6, 12, 18, 24...";
  Times tables chanting in reverse order: "108, 99, 90, 81...";
  Using times tables songs, like Schoolhouse Rock's <u>'3 is A Magic Number'</u>;
  Asking your child multiplication calculations out of order, like: "What is 4 x 7? What is 9 x 5? What is 6 x 11?" to develop fluency and mental maths;
  Using a multiplication square and skip counting to build confidence;

  - Using pasta pieces or pebbles to solidify the concept of multiplication, e.g. four groups of three pasta shells to show  $3 \times 4 = 12$ ;
  - Play maths games online.
    - www.ttrockstars.com
    - www.timestables.co.uk/multiplication-tables-check/
    - urbrainy.com/mtc
    - www.topmarks.co.uk/maths-games/hit-the-button
- If you have any concerns, talk to your child's teacher.
- If your child has any concerns, encourage them to talk to a trusted adult (for example, yourself, their teacher).