

Year 4 Multiplication Tables Check 2023 Presentation for Parents & Carers

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Wednesday 25th January 2023

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 result across all schools in England, not individual schools.

When the check will take place

- There will be a 3 week window from **Monday 4th June to Friday 16th 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 onscreen 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.

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.
- Reversal of questions (e.g. 8×6 and 6×8) 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, 8×3 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

Why are times tables so important?

- Supports mathematical learning, particularly aspects of number (long multiplication, short division)
- Supports other mathematical learning eg. calculating equivalent fractions, finding the area of a square/rectangle, finding fractions of amounts
 - It will help children to calculate more fluently. (Children can then focus on the method needed to complete a reasoning problem rather than being distracted with struggling to work out the times table)
- Consequently, children will feel more positive/ confident within maths.
- Children are expected to know their times tables by the end of Year 4 so that they can work confidently in Years 5/6 and beyond into secondary school.

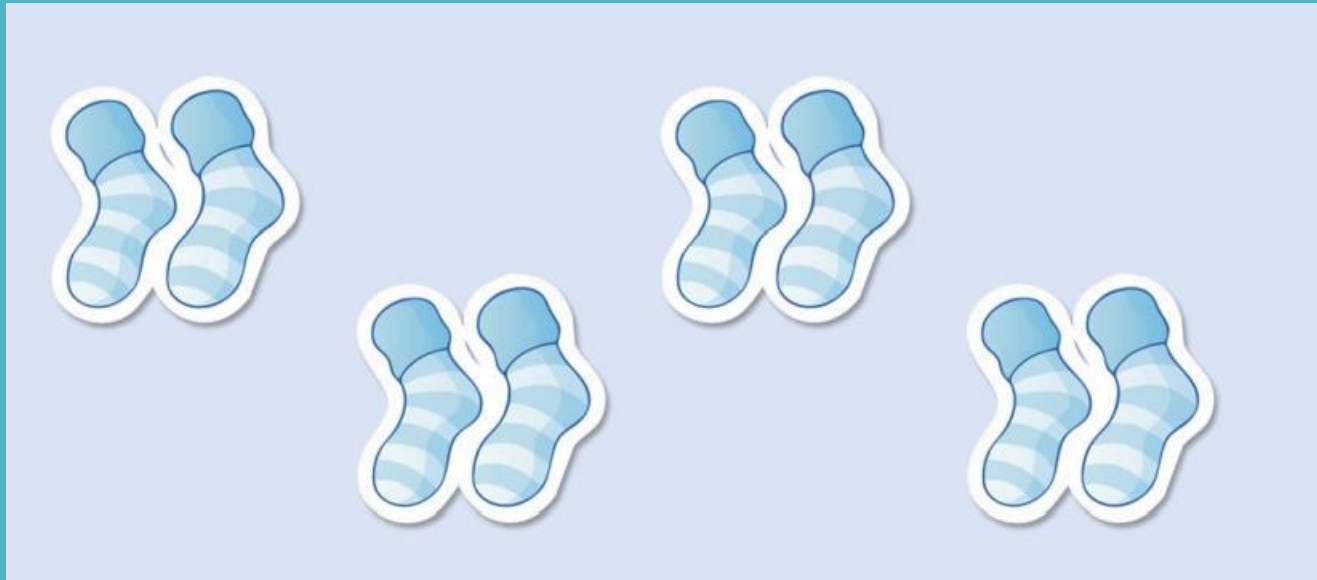
Ways to support times table knowledge

- Count and look for patterns.
- Understand that multiplication is repeated addition.
- Remember that multiplication is commutative. ($4 \times 8 = 8 \times 4$)
- Remember that multiplication is the inverse of division.
- Recall and utilise number families. ($6, 7, 42$ $6 \times 7 = 42$ $7 \times 6 = 42$ $42 / 7 = 6$ $42 / 6 = 7$)
- Learn tricks such as 5,6,7,8 for remembering 7×8 and $8 \times 7 = 56$ Use different representations to represent multiplication, such as:
 - Concrete manipulatives such 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.

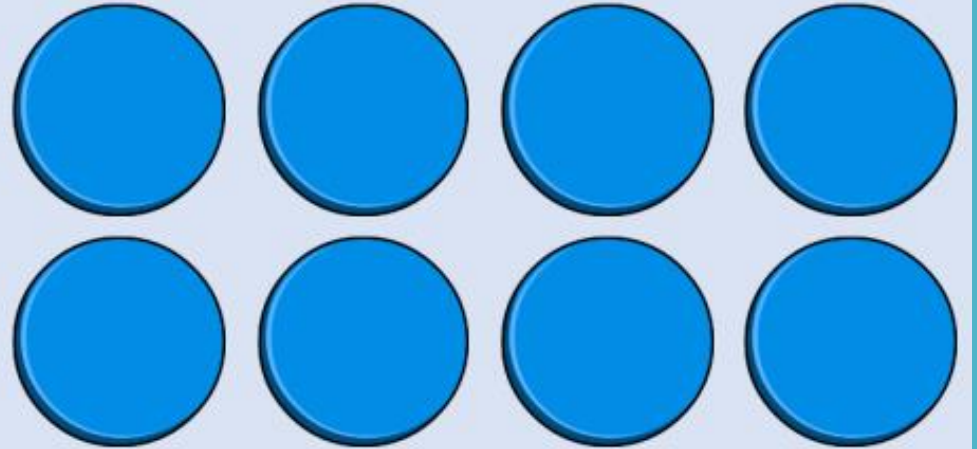


Repeated addition

Knowing that 2×4 is the same as $2 + 2 + 2 + 2$



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

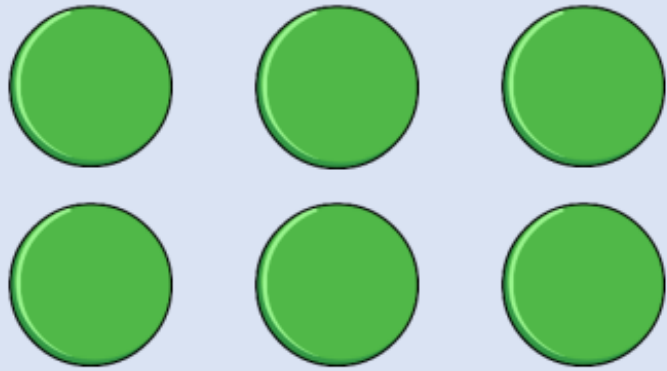


$$2 \times 4 = ?$$

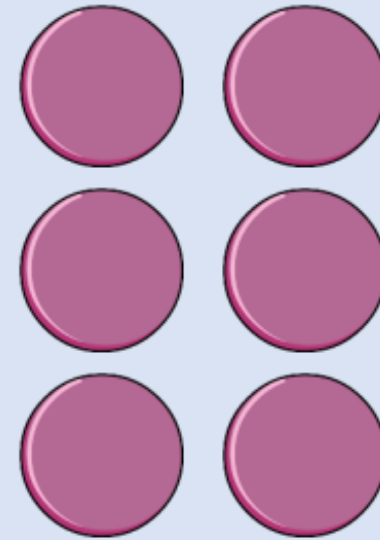
Multiplication is commutative

3×2 is the same as 2×3

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.



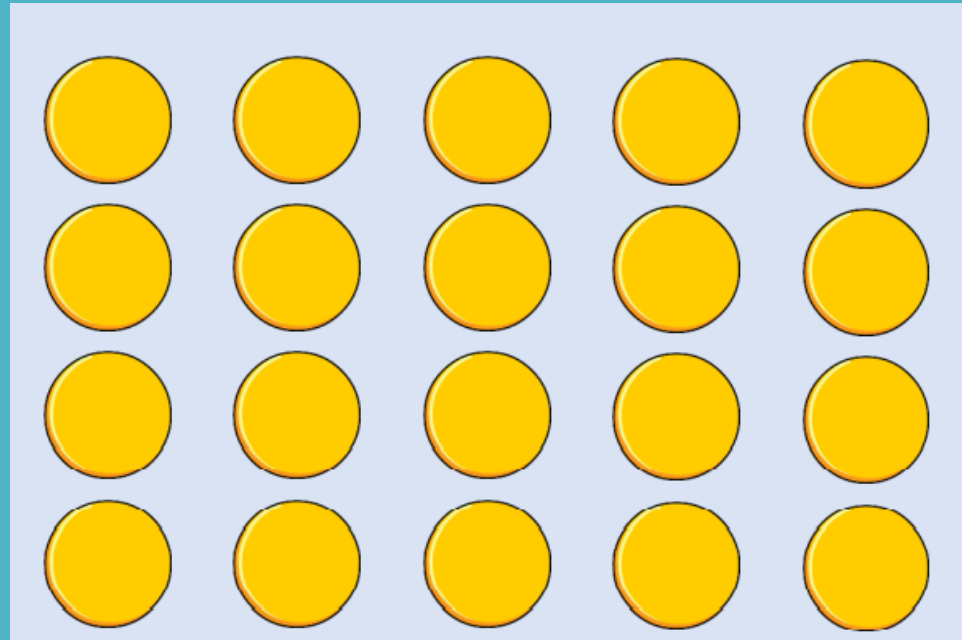
3 lots of 2 = 6



2 lots of 3 = 6

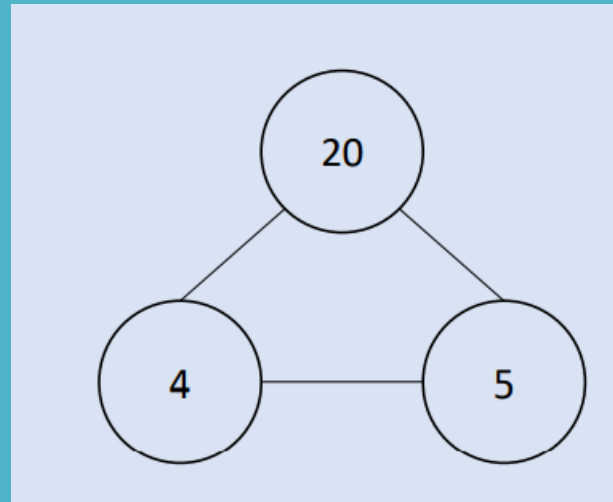
Multiplication is the inverse of division

$20 \div 5 = 4$ 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



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

$$12 \times 6 = ?$$

I know $11 \times 6 = 66$ Therefore, $66 + 6 = 72$ By using known facts from 'easier' times tables, children should be able to find answers with increasing speed.

How best to prepare your child for the check

Times tables chanting: “6, 12, 18, 24...”;

Tt rockstars practise at home

Times tables chanting in reverse order: “108, 99, 90, 81...”;

Using times tables songs, like Schoolhouse Rock’s ‘3 is A Magic Number’;

Using apps – our favourites are Times Tables Rock Stars or Hit the Button

Asking your child multiplication calculations out of order, like: “What is 4 x 7?

What is 9 x 5? What is 6 x 11?”;

Using pasta pieces or pebbles to show groups of numbers representing times tables, e.g. four groups of three pasta shells to show $3 \times 4 = 12$;

