

Year 4 Multiplication Tables Check
2022 Presentation

Thursday 27th January, 5:30pm

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 6th June to Friday 24th 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.



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



Ways to support multiplication and division facts 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:

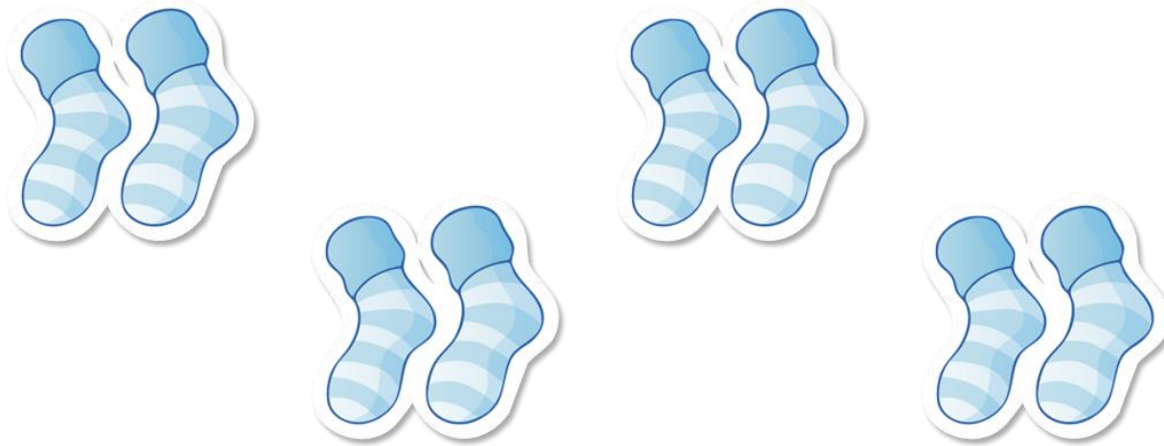
- Concrete manipulatives such as multi-link cubes or counters.
- Create pictorial representations such as arrays.



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.

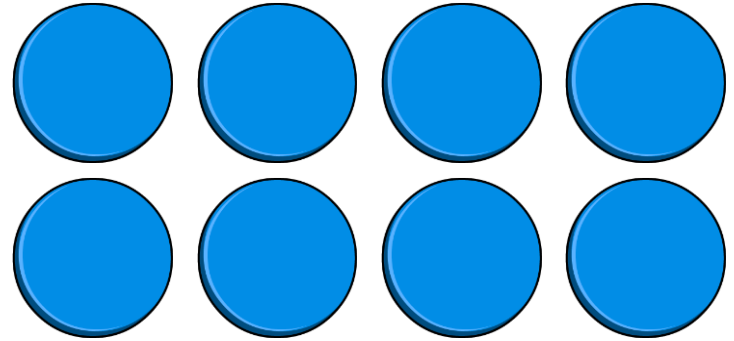


Repeated addition

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



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



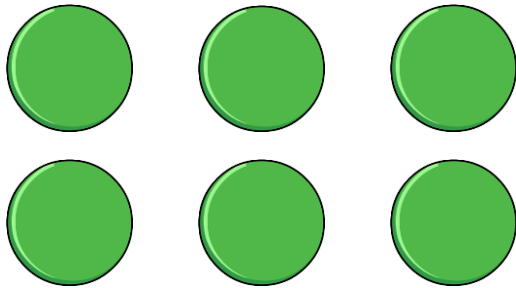
$$2 \times 4 = ?$$



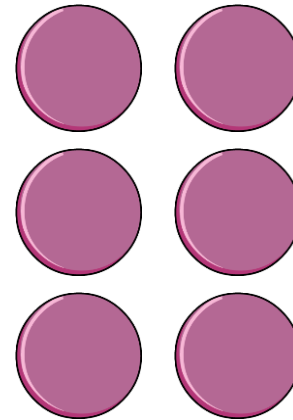
Multiplication is commutative

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



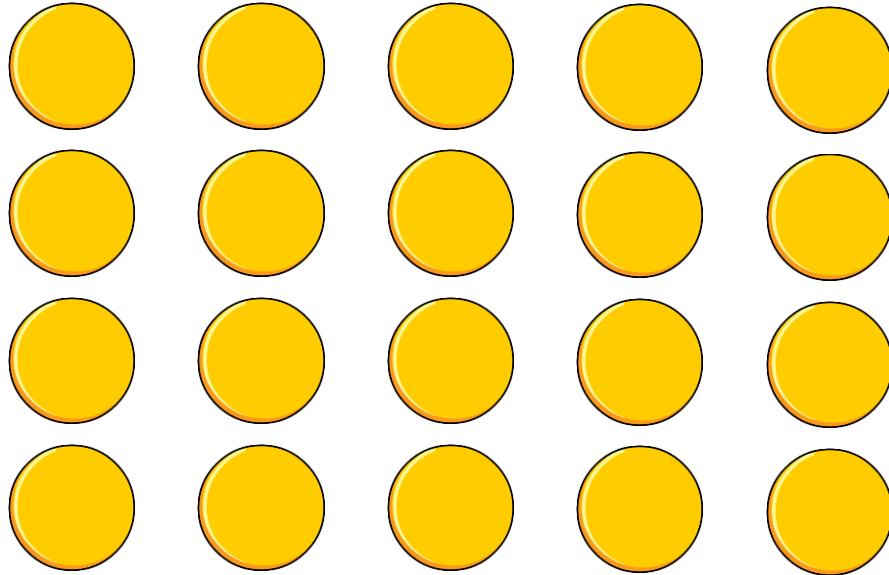
2 lots of 3 = 6



Multiplication is the inverse of division

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

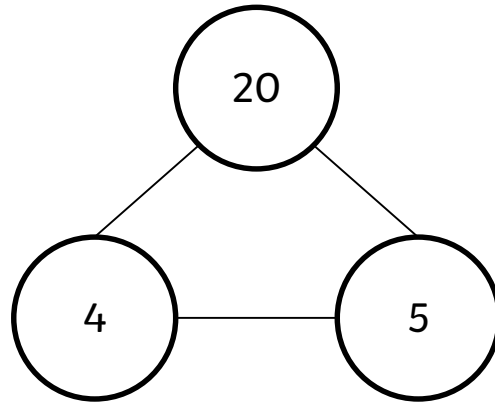
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



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.



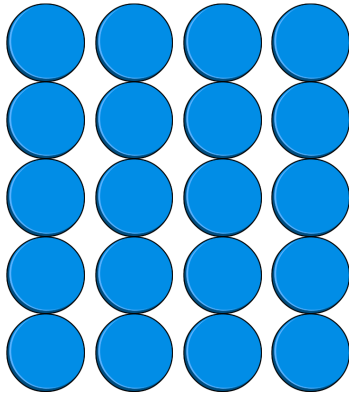
Using known facts

$$4 \times 6 = ?$$

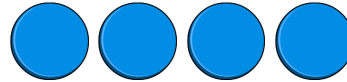
$$\text{I know } 4 \times 5 = 20$$

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

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



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How school is best preparing the children

- Focusing on times tables (and division facts) during Early bird time to practise and revisit. Each child has a Times Tables workout book.
- Focus on the teaching of all multiplication and division facts up to 12×12 in maths lessons (starters).
- Competitions on TTRockstars between classes and year groups to encourage children to play.
- Weekly times tables test
- Half termly times tables test (100% badges)



How best to prepare your child for the check

- Remind them that the check should last no more than **5 minutes**.
- Encourage children to complete all TTRockstars homework.
- Online games/resources
- If you have any concerns, talk to your child's teacher.
- If you're looking to support your child further with learning and practising their multiplication and division facts at home, there are lots of good websites with free resources.

<https://www.topmarks.co.uk/maths-games/7-11-years/times-tables>

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

