



# Year 4 Multiplication Tables Check 2022

## 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.



## 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.  $8 \times 6$  and  $6 \times 8$ ) 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,  $8 \times 3$  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 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 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.

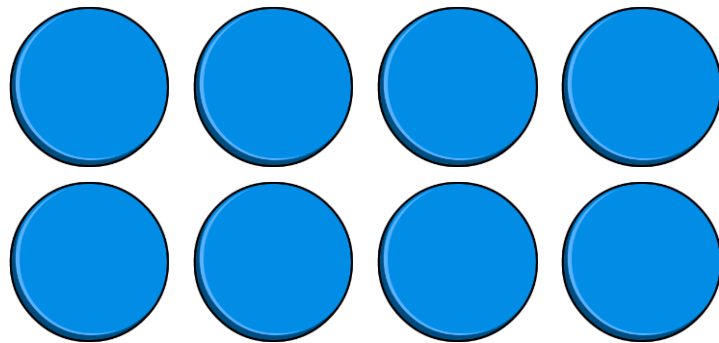


# Repeated addition

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



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



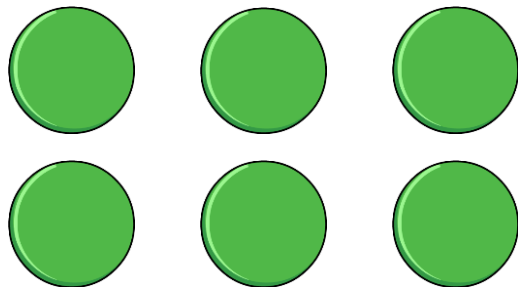
$$2 \times 4 = ?$$



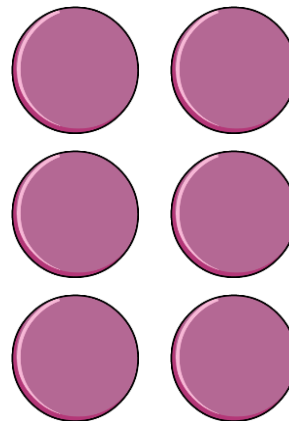
# Multiplication is commutative

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

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



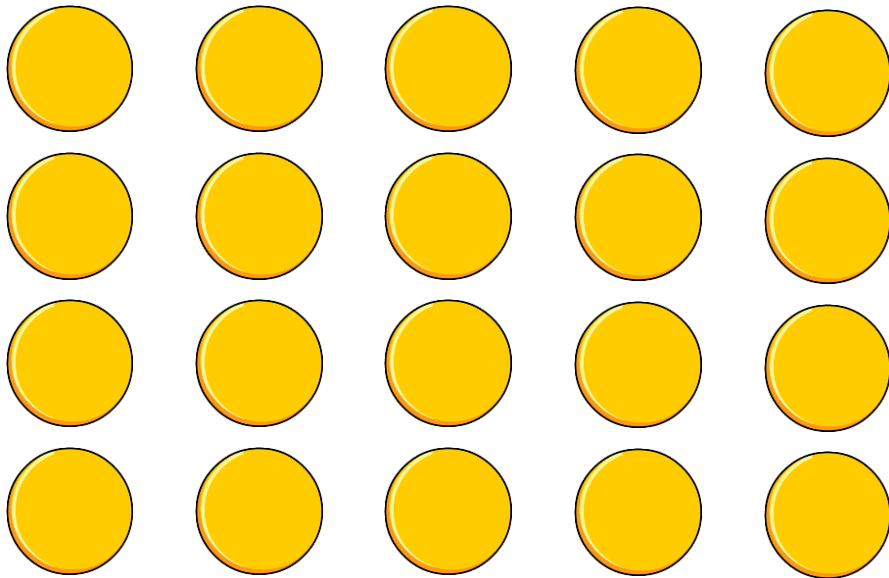
2 lots of 3 = 6



# Multiplication is the inverse of division

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

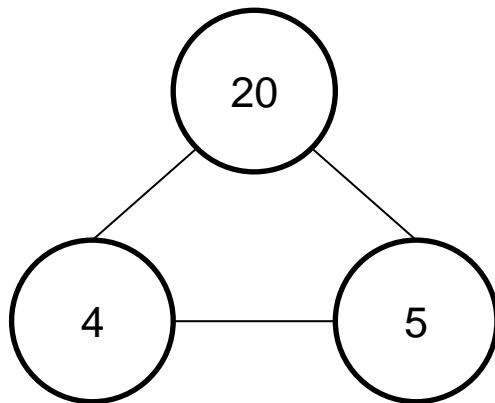
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



## 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.



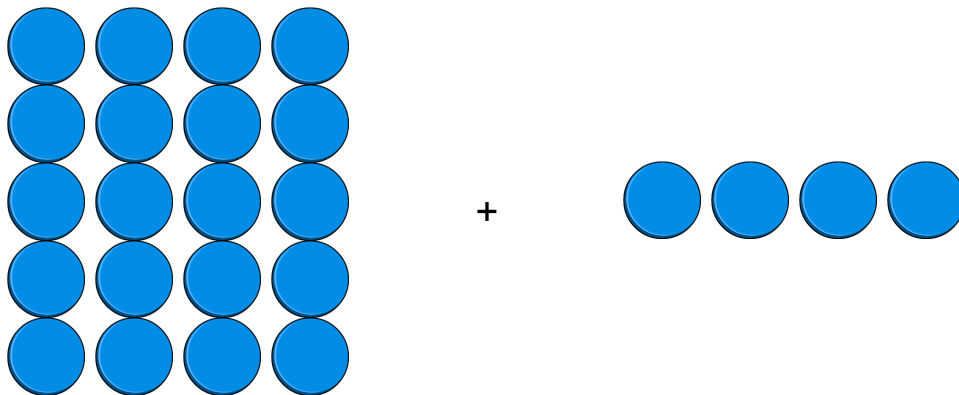
## Using known facts

$$4 \times 6 = ?$$

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.



## 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.
- 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).
- If you're looking to support your child further with maths at home, there are lots of good websites with free resources.

