Y4 Multiplication Tables Workshop

Tuesday 7th November 2023

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 in England, not individual schools.

When the check will take place

- There will be a 2 week window in June 2024 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 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 (multiplier) 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

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 fact families.

Use different representations to represent multiplication, such as:
- Concrete manipulatives suck as multilink cubes or counters.
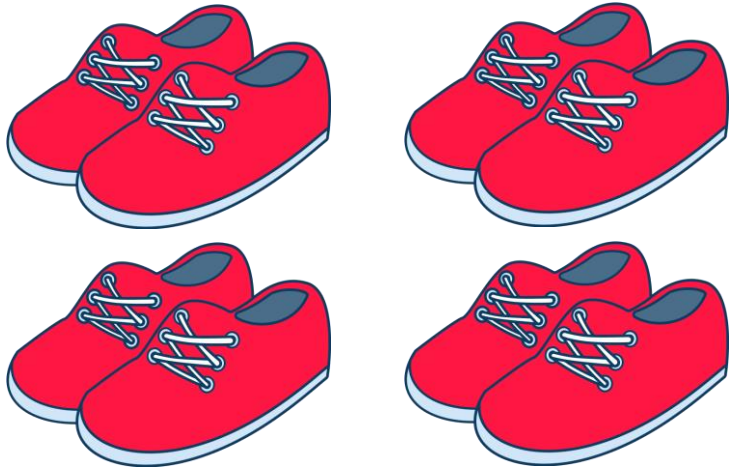- Create pictorial representations such as arrays.

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.
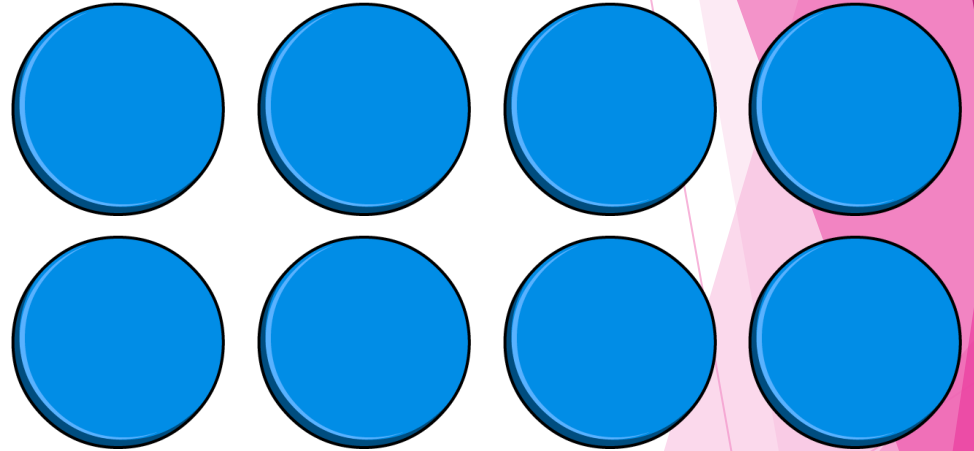- When children are secure with counting, they can then look for patterns.
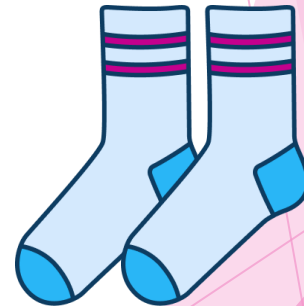
Repeated addition

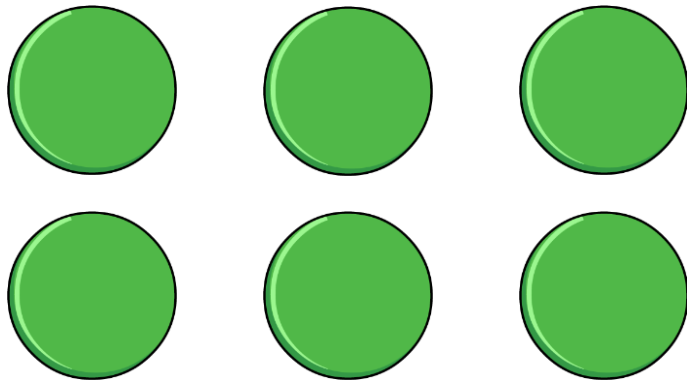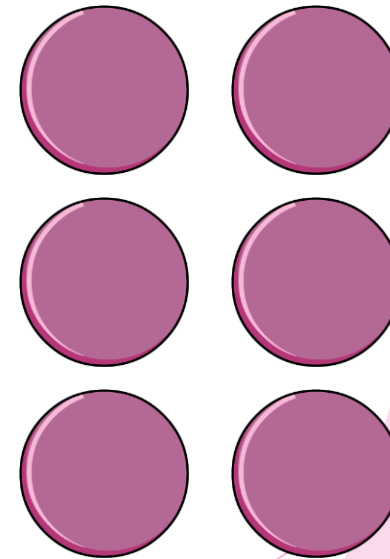Knowing that 2 x 4 is the same as 2 + 2 + 2 + 2

2 + 2 + 2 + 2 = ?

2 x 4 = ?

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.
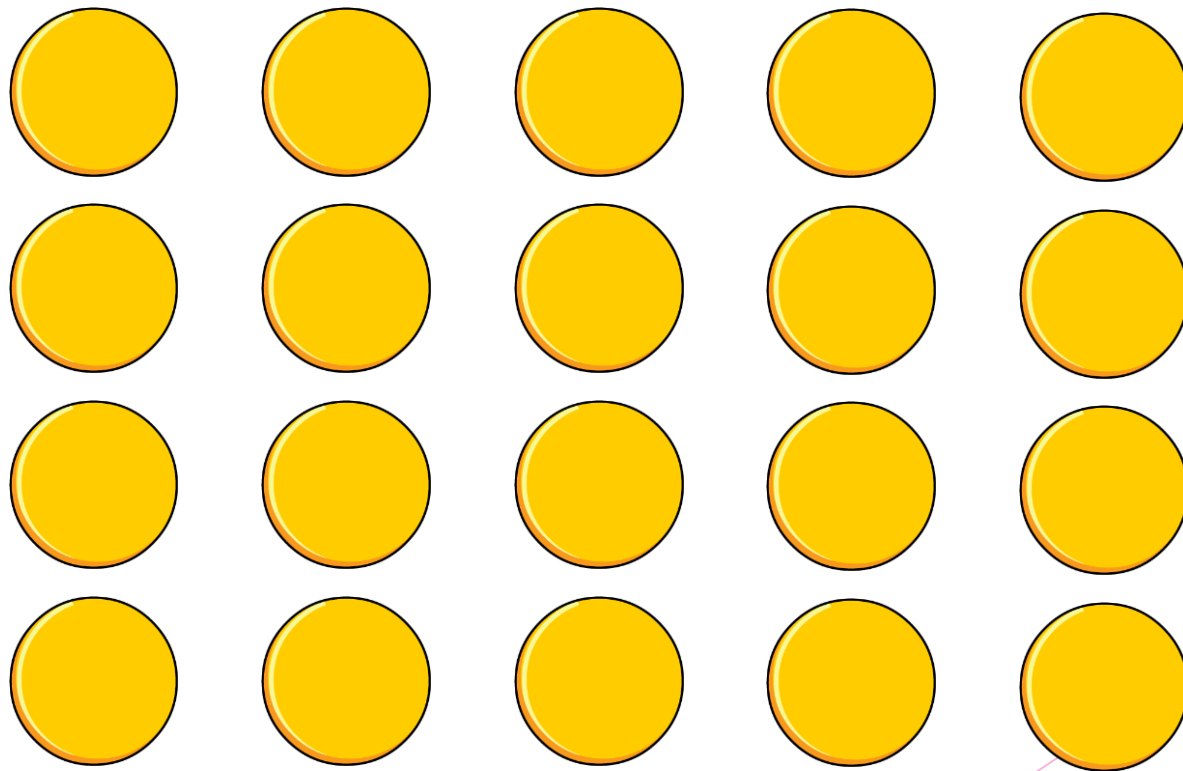
3 lots of 2 = 6

2 lots of 3 = 6

Multiplication is the inverse of division

20 ÷ 5 = 4 can be worked out because 5 x 4 = 20

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

Fact families

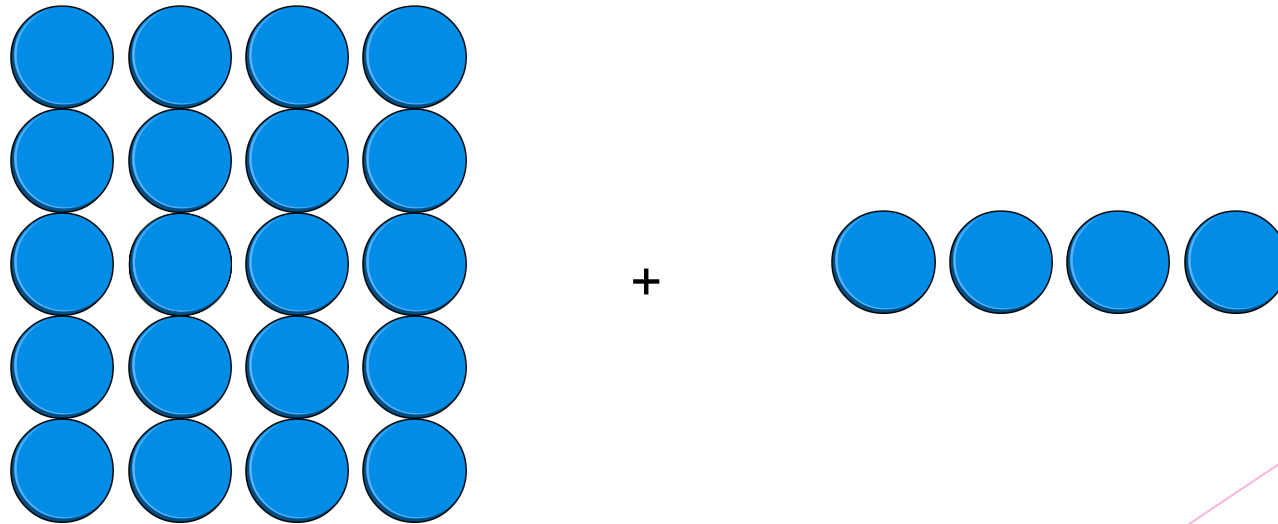$4 \times 5 = 20$, $5 \times 4 = 20$, $20 \div 5 = 4$, $20 \div 4 = 5$

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.
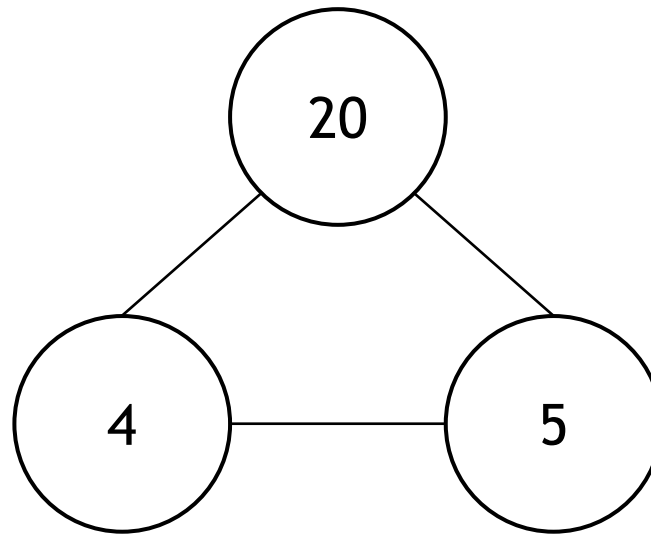
Using known facts

4 x 6 = ?
I know 4 x 5 = 20
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 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).

What we will do in school

- Every day, all pupils will take part in a multiplication lesson.

- We have created a long term plan to ensure that all times tables (including previously learnt tables) are taught explicitly before June.
- We will also ensure that interventions take place where needed.

- Our planning involves lots of repetition and replaying fun and familiar games in order to build the children's confidence and recall of their tables.

- We will inform parents of which times table we are focusing on each week on Seesaw.

Our lessons

- Our lessons are based upon research and training from maths specialists on what works successfully in helping children learn and remember their multiplication tables.

- Here is a video to demonstrate how repetition and building confidence can support the learning of even the most difficult times tables (don't worry – Y4 will not be tested on the 17 times tables)!

https://www.youtube.com/watch?v=yXdHGBfoqfw

Our lessons

- We would love for you to experience what a Y4 multiplication will look like. We are going to challenge you to learn your 12 times tables. Don't worry if you're unsure of them as we aim to make it fun and build our confidence.

1. Counting

We will start by collectively chanting our 12 times tables. Please join in with any that you know.
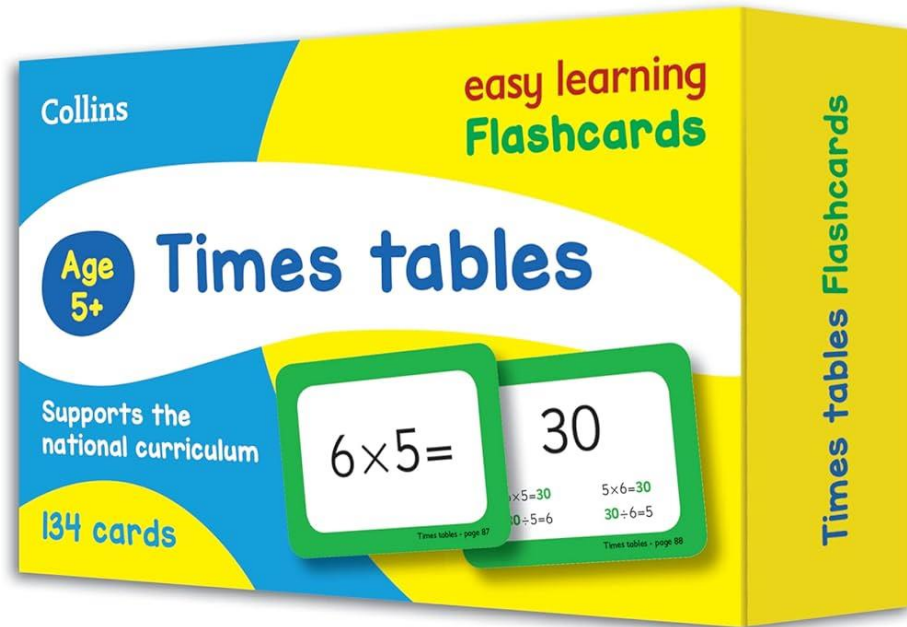
Our lessons

2. Structured Teaching

We will show you how building connections and recognising patterns can support the learning and recall of multiplication tables.

Multiplication Times Tables

Using a Counting Stick

*All Multiplication Times Tables Facts*
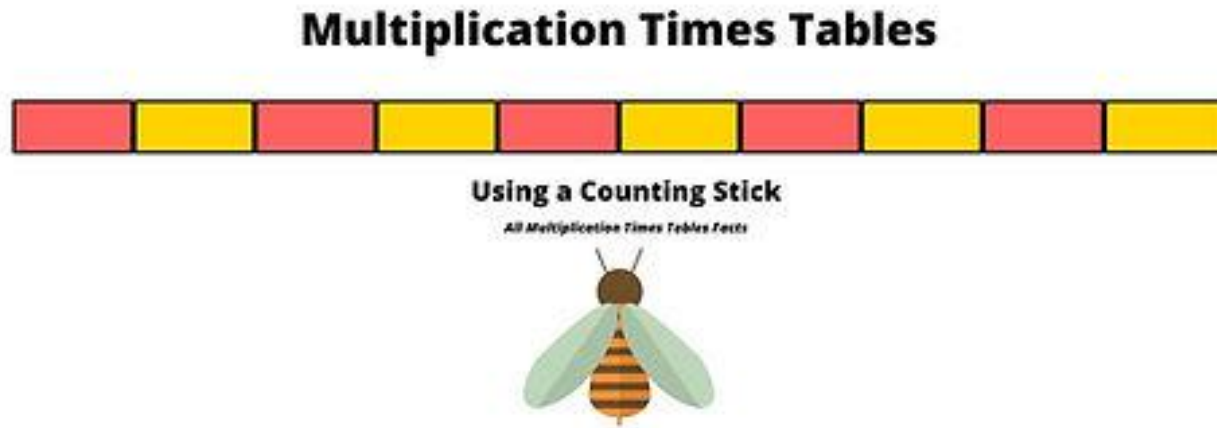
Our lessons

3. Repeated Practice

We're going to use flashcards to test our understanding so far.

4. Connect/Apply It
This is our opportunity to independently assess who has understood the times table or who needs further support in future lessons. The hope is that the build-up of the lesson has supported pupils in feeling confident to give their independent practice a go.
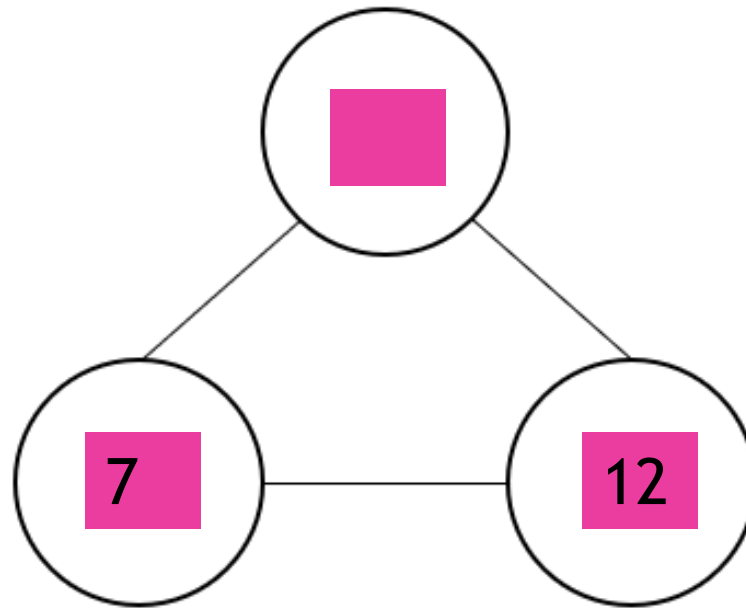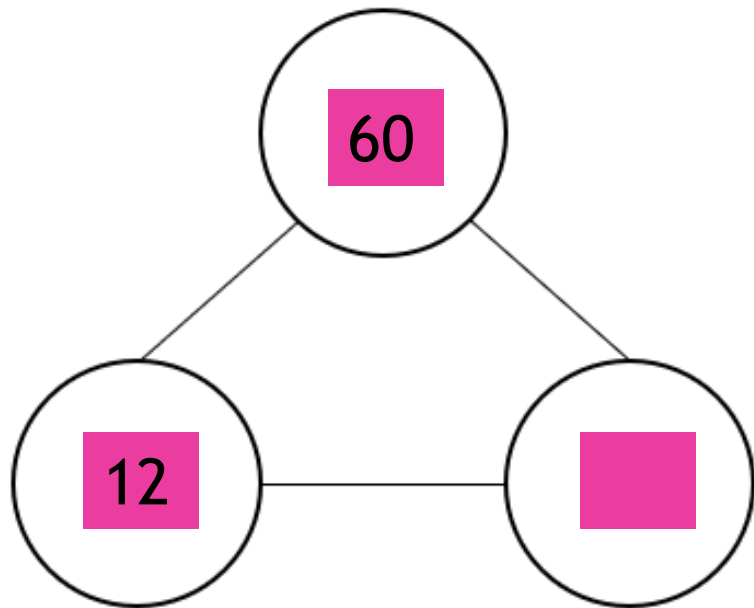
Thank you for coming.

- Your support goes a long way in helping the children to secure their times tables knowledge.

- This knowledge will support the pupils across the maths curriculum for the rest of their time in education.

- We have collated a range of resources and example activities for you to use at home to support the children's learning further.

- We will now be happy to answer any questions.