



# MTC Parent Workshop

The MTC and Times Tables

Miss Davies & Mr Spendlove

Manland Primary School



# Aims of the Session

01

To help you to understand what the MTC is.

02

To demonstrate a little of how we teach times tables.

03

To show you TTRockstars and encourage (healthy) practise at home.

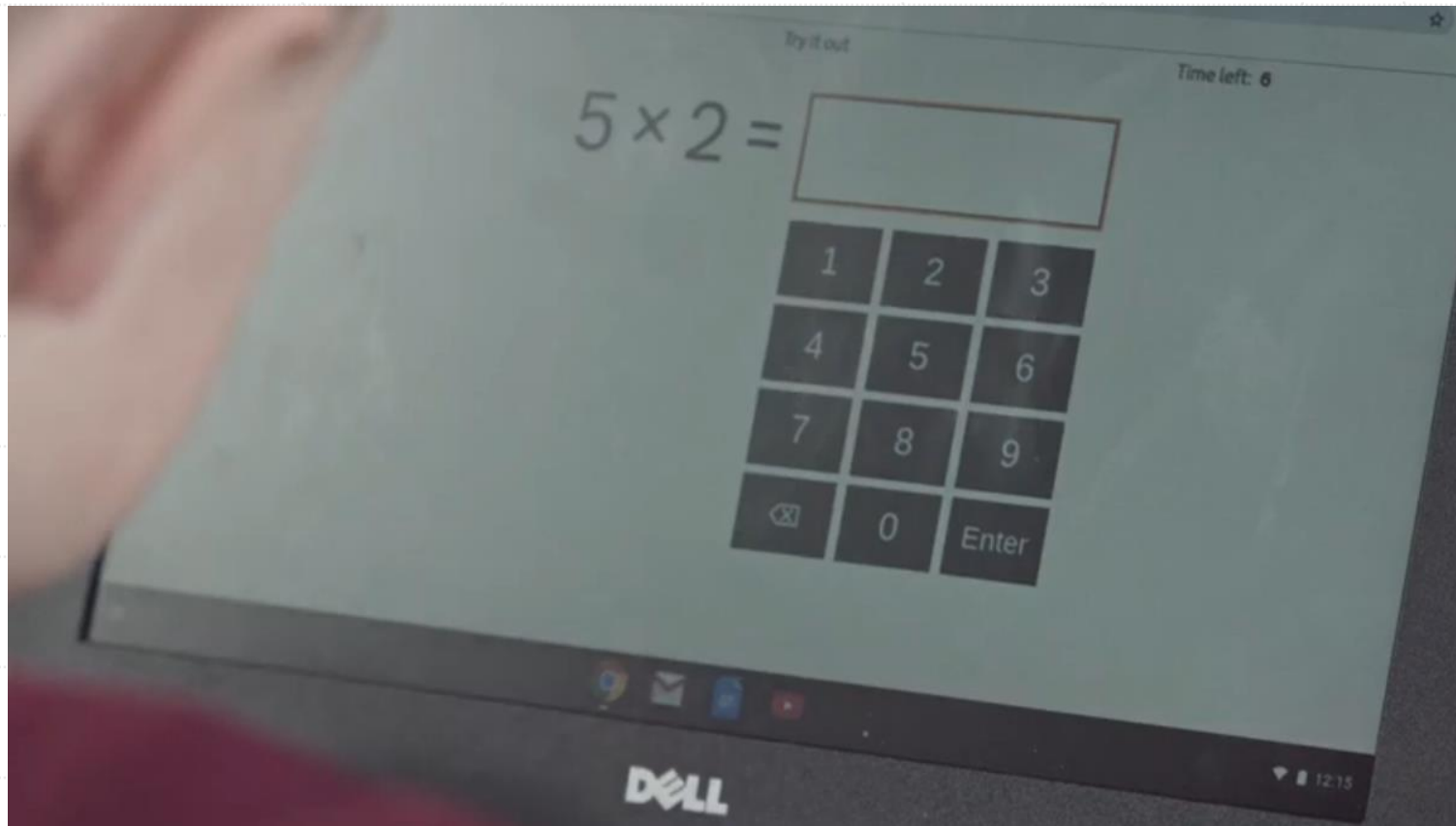


What is the MTC?

**M**ultiplication

**T**ables

**C**heck



# What is the MTC?

- Digital statutory assessment of children's fluency with multiplication facts.
- Compulsory for Year 4 from last year.
- Tests table facts up to  $12 \times 12$ .
- Takes place in June.
- No pass rate, no resits.

<https://www.youtube.com/watch?v=ct5cDctLVTI>





## How will the check be carried out at Manland?

- Children will go out of class in small groups.
- They will sit with a familiar adult and use an iPad to access the DfE website where the check is administered.
- Children will enter their answers using the touch screen.
- Children have 6 seconds to answer each question, with a 3 second pause between each question.
- There will be 3 practise questions, followed by 25 randomly assigned questions.

## 5.2.1 Table 1 – Multiplication table limits in the MTC

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.

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



# Access Arrangements

- If your child receives support to access the curriculum, they may also need support to access the MTC.
- There are a range of options to apply to the check to ensure it is as inclusive as possible including:
  - 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.



How many facts is that?!

144

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

How many facts is that?!

~~154~~  
144

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

How many facts is that?!

30

12 nasty ones

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144



# How will this affect my child?

- Very little!
- The national curriculum expectation hasn't changed.
- The results of these assessments are for use internally to guide teaching, and nationally to see trends.
- They will practise their times tables in formats similar to the assessment so they aren't blindsided by the check.



# How does Manland teach times tables?

- There is a progression throughout the school, as outlined by the national curriculum.
- Teachers explicitly teach tables as part of the maths scheme of work that we follow.
- Teachers weave times table practise and games into their day.
- Teachers use paper and electronic TTRockstars to practise.

# Counting and looking for patterns.

Example: Counting in 2s

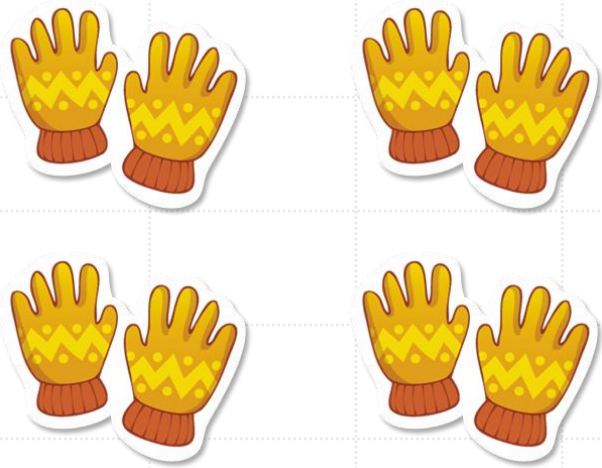
2, 4, 6, 8, 10...

- Ensure children have a strong understanding of counting in groups first.
- When children are secure with counting, they can then look for patterns.

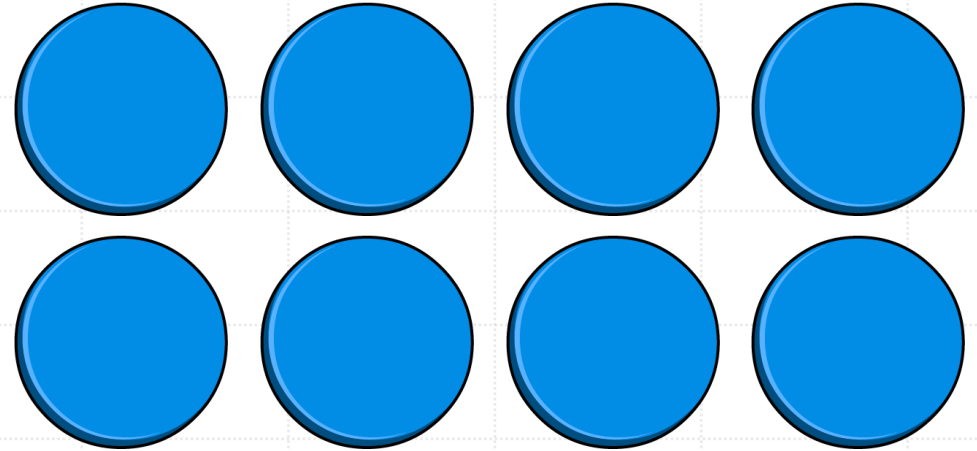


# Repeated addition

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



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

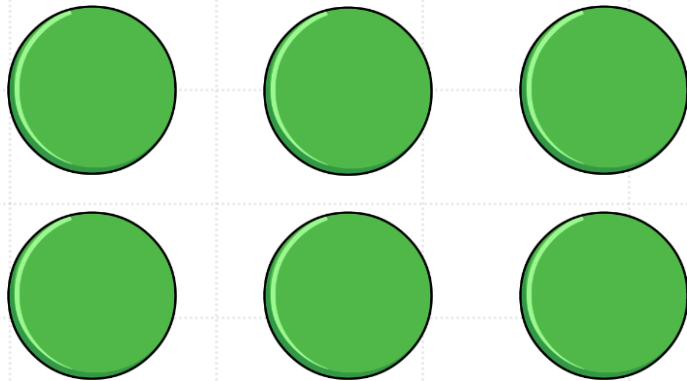


$$2 \times 4 = ?$$

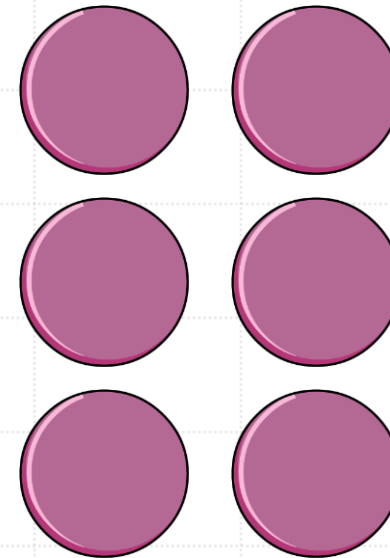
# Learning about commutativity

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

Children need to understand that multiplication can be completed in any order to produce the same answer. This link will be taught explicitly.



3 lots of 2 = 6



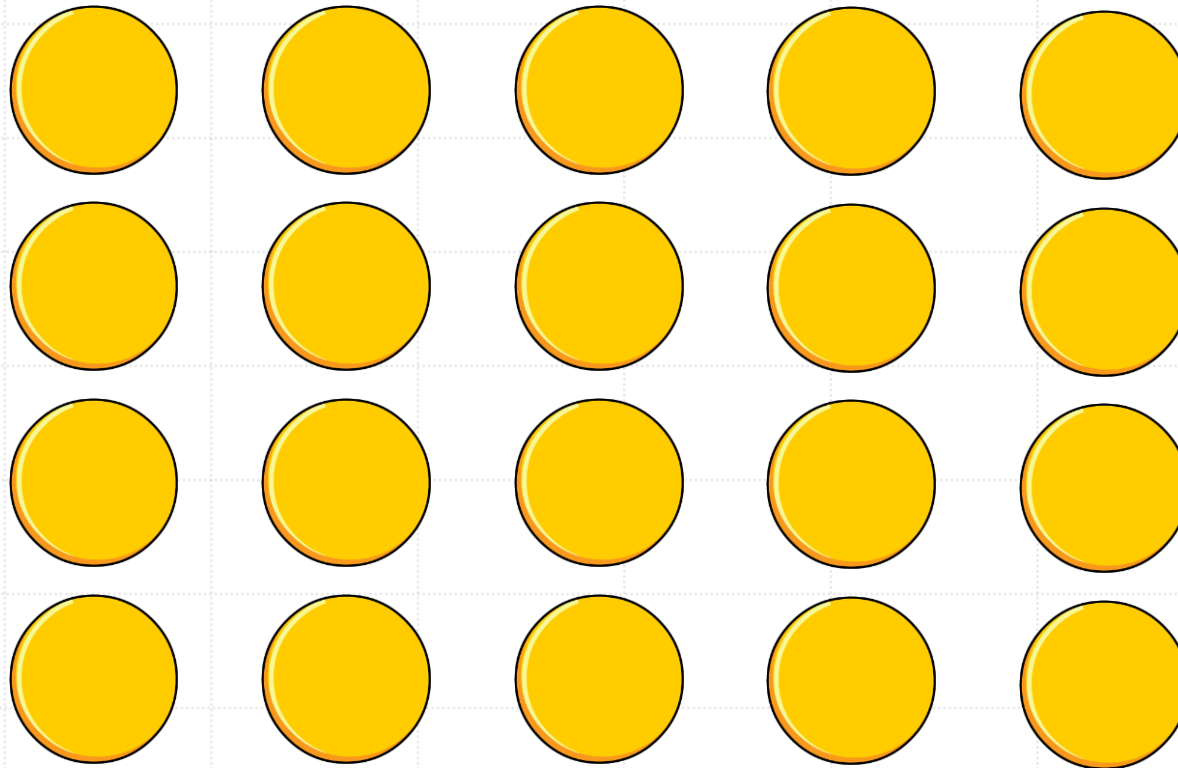
2 lots of 3 = 6



# Multiplication is the inverse of division

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

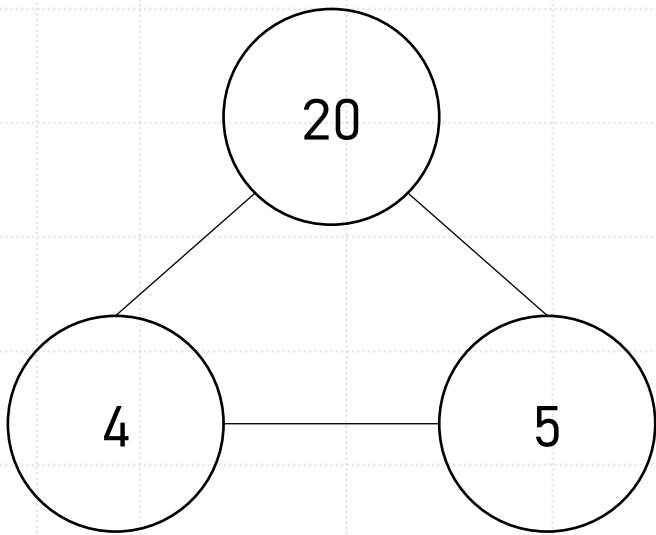
Using pictorial representations (such as arrays) is useful here for children to see the link between multiplication and division.



## Related facts

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

Due to their commutative understanding, children should also be able to see groups of related facts. This will be discussed and problems such as these will be explored.



4.

$55$   
 $\div$   $\div$   
 $5$   $\times$   $\square$

5.

$\square$   
 $\div$   $\div$   
 $2$   $\times$   $12$

6.

$50$   
 $\div$   $\div$   
 $\square$   $\times$   $10$

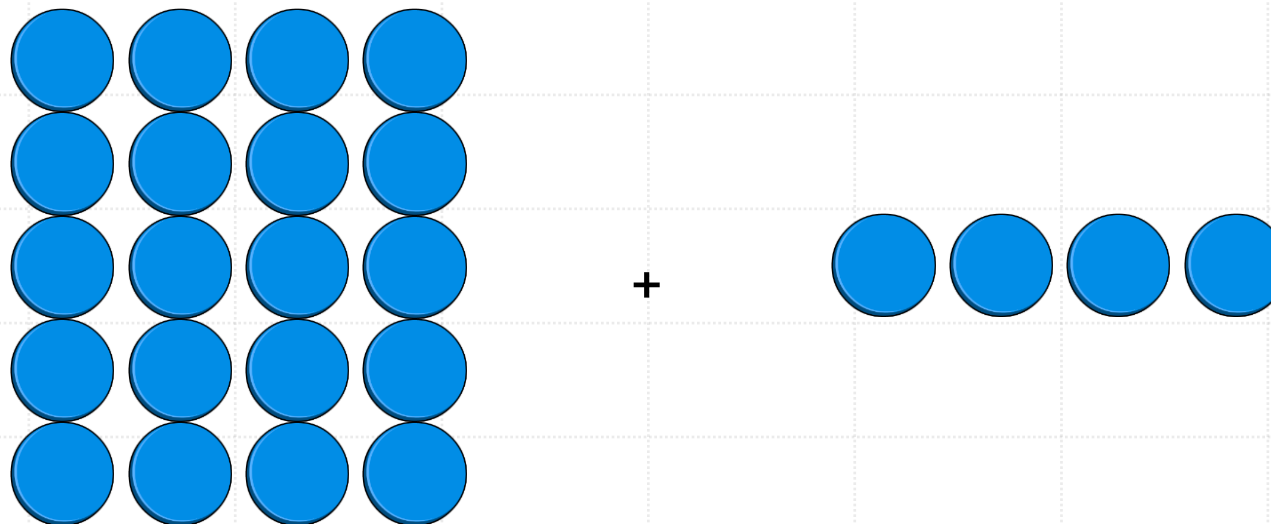
## Using known facts

$$4 \times 6 = ?$$

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 can you help at home?



Be positive!



If you are practising at home, try and focus on one times table or a few key facts.



Think about how you have learned the tables – do you have a trick you could share?



Find practise opportunities in the world.



Encourage them to make the links of commutativity.



TT Rockstars

- Times Tables Practise!
- Children tend to find customising their character and earning coins motivating.
- The best way to earn coins is by doing the garage mode – these are the tables chosen (or calculated) to be the ones that need practising.
- Soundcheck – Similar to the MTC but disguised!
- Arena allows competition with friends on a level playing field.



Any  
questions?

