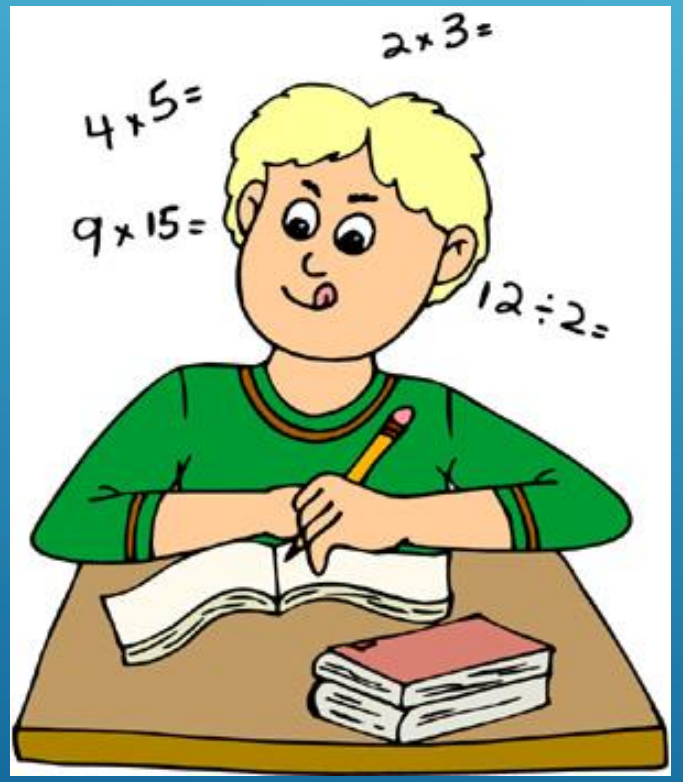
Year 4 Multiplication Tables Check (MTC)



OBJECTIVES

- To know the National Curriculum Expectations for times tables.
- To know and understand about the new Multiplication Tables Check (MTC)
- To know how to support your child at home in preparation for the MTC.

WHY HAS THE GOVERNMENT DECIDED TO INTRODUCE THIS ASSESSMENT?

- **End of year expectations for Year 4 are that children recall and use multiplication and division facts up to 12 × 12.**
- Just as the phonics screening check in Year 1 assesses children's progress with their phonics skills, **the multiplication tables check will help teachers identify those pupils who require extra support, in order to become secure with multiplication and division facts up to 12 x 12 (end of Year 4 expectation)**

- *"This will ensure that all pupils leave primary school knowing their times tables by heart and able to start secondary school with a secure grasp of fundamental arithmetic as a foundation for mathematics."* **Nick Gibb, Education. Department of Education (2018 Feb)**

NATIONAL CURRICULUM EXPECTATIONS

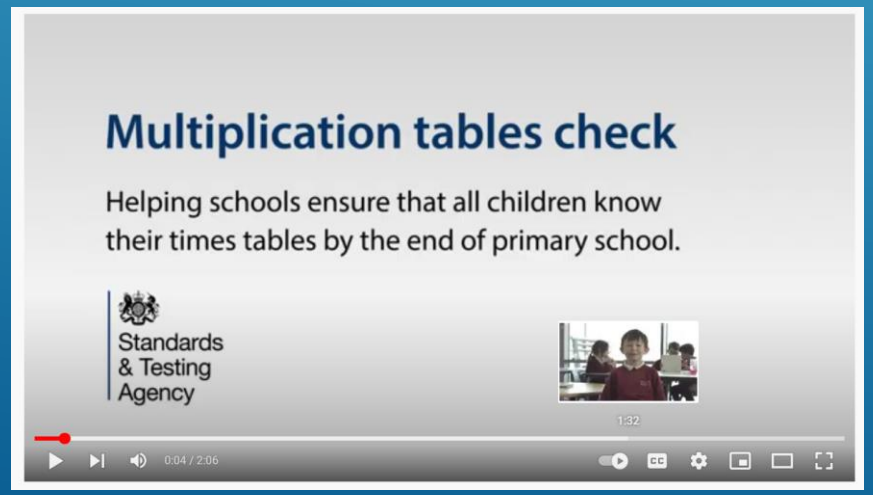
Year Group	Expectation
Year 1	Count in multiples of 2, 5 and 10. Recall and use all doubles to 10 and corresponding halves.
Year 2	Recall and use multiplication and division facts for the 2, 5 and 10 times tables including recognising odd and even numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 times tables.
Year 4	**Recall and use multiplication and division facts for tables up to 12 x 12**
Year 5	Revision of all times tables and division facts up to 12 x 12
Year 6	Revision of all times tables and division facts up to 12 x 12

WHEN WILL THE MTC TAKE PLACE?

- The government are implementing a **statutory** 'check' in Year 4, and will take place **in June 2022**.

- Due to the pandemic, this is the first time it has been **statutory**.

- Three week window in June **beginning the 6th June 2022**

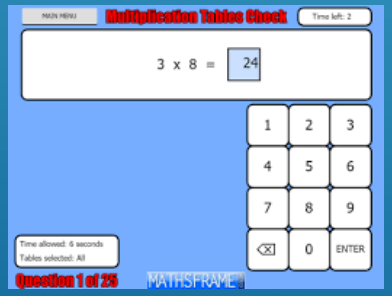


Here is a brief video from the Government explaining the need for this **statutory** check.

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

THE CHECK: WHAT DOES IT ENTAIL?

- 25 questions from 2 - 12 times tables, **with a focus on 6, 7, 8, 9, 11 and 12 times tables.**
- The check will be carried out **on a computer or an IPad.**
- Children have **6 seconds** to answer each question, which are generated randomly from an online database.
- **Each question will only appear once** in any 25-question series, and children won't be asked to answer reversals of a question as part of the check (so if they've already answered 3 x 4 they won't be asked about 4 x 3).
- Once the child has inputted their answer on the device they are using, **there will be a three-second pause before the next question appears.** Children will be given the opportunity to practise answering questions in this format before the official check begins.
- **There is no pass mark**.

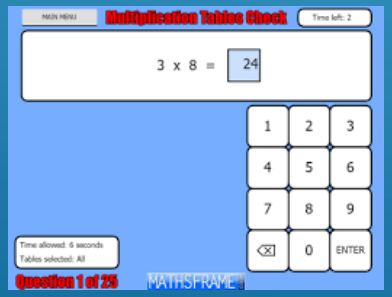


TEACHING OF TABLES AT DAYS LANE

- Currently, all children in Y2 – Y6, are tested **weekly** on their number bonds or times tables.

- **Once children are in Y3, they have times table lessons** that last 20 – 30mins each.

- Within a times table lesson, they will:
  - Be taught strategies to help them
  - Chant/sing the times tables
  - Participate in a carousel of activities to strengthen their existing knowledge of the times tables and learn new ones
- **These times table lessons continue into Year 4.**



RESOURCES FOR YOU: FURTHER INFORMATION

An **information leaflet** and **other printable resources** have been uploaded onto **the Parent Classroom** on Google.

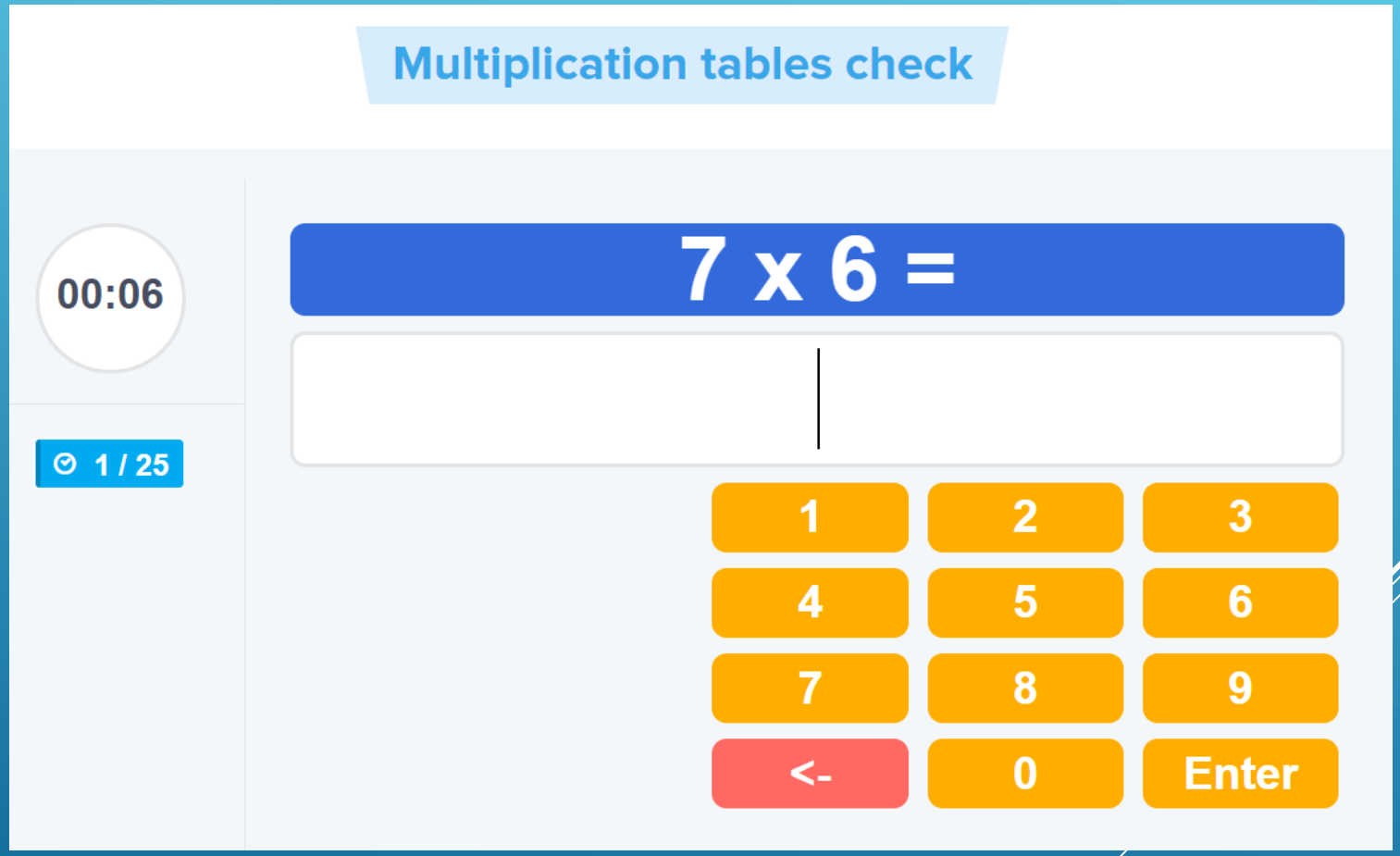
Here are some **further documents** that outline the process of the times table check:

- https://blog.oxfordowl.co.uk/what-is-the-year-4-multiplication-tablescheck/
- www.theschoolrun.com/new-primary-school-times-tables-tests-explained
- https://matr.org/blog/times-tables-test-parents-guide

RESOURCES FOR YOUR CHILD: PRACTICE

This is the website that we use in school for practice.

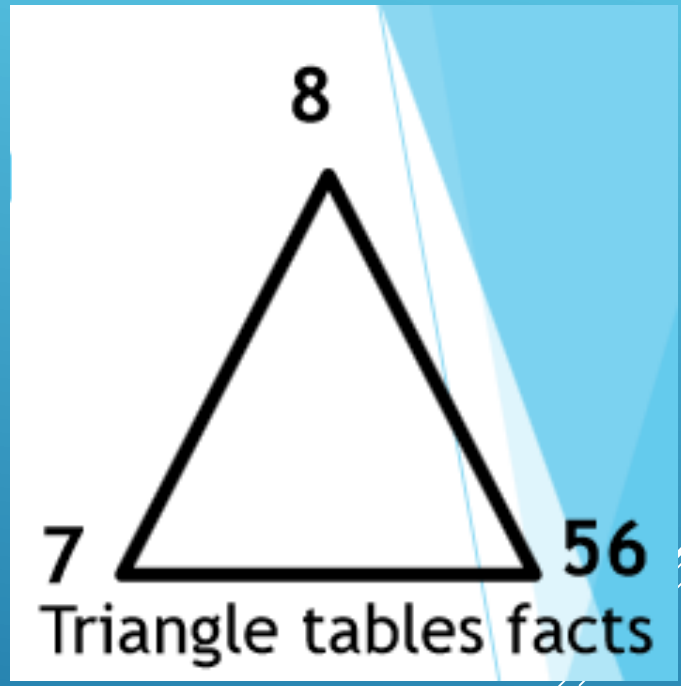
The format of this tables check is similar to the Government check.



https://www.timestables.co.uk/multiplication-tables-check/

GAMES & TOOLS TO USE WITH YOUR CHILD

12 X 12 Multiplication Table													
X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144



GAMES & TOOLS TO USE WITH YOUR CHILD

1. Create a set of calculation cards for your times table:

Front | 8x7

Back | = 56

2. Use these games (in order) with your calculation cards to embed times table knowledge and build speed.

Speedy race (in order): Working in pairs, one person uses the cards in order to say the calculation on each card as quickly as possible. The other person checks the answer on the back. Swap roles when you have completed all of the cards.

Speedy race (out of order): Shuffle the cards so that they are not in order. working in pairs, one person uses the cards in order to say the answer to the calculation on each card as quickly as possible. The other person checks the answer on the back. Swap roles when you have completed all of the cards.

Switched: Mix up the cards so that some answers are face up. Working in pairs, take turns to choose a card and say the answer to the calculation, or say the calculation if the answer is face up. If you're correct, keep the card in your pile until all cards are gone. The person with most cards wins.

Take turns: Keep the cards in order. Working in pairs, take turns to choose a card and say the answer to the calculation. If you're correct, keep the card in your pile until all cards are gone. The person with most cards wins.

GAMES & TOOLS TO USE WITH YOUR CHILD

Silly rhymes and songs can help children to remember these patterns, e.g. '0 2 4 6 8, my mum thinks I'm great' – the sillier the better really!

3x3=9	Swing from tree to tree on a vine, three times three is nine.
7x7=49	Seven times seven is like a rhyme, it all adds up to 49.
8x8=64	He ate and ate and was sick on the floor, eight times eight is 64.

You can:

- See if, together, you can think of a silly rhyme to go with the first few numbers in each table: **'5, 10, 15, 20 ...'**

GAMES & TOOLS TO USE WITH YOUR CHILD

One Less Equals Nine!

This is a strategy for learning the 9 x tables. The key to it is that for any answer in the nine times table, both digits add up to 9. Try it and see!

1. Subtract 1 from the number you are multiplying by. E.g. 7x9, one less than 7 is 6.
2. This number becomes the first number in the answer. 7x9=6__
3. The two numbers in the answer add up to 9 so the second number must be 3. 7x9=63

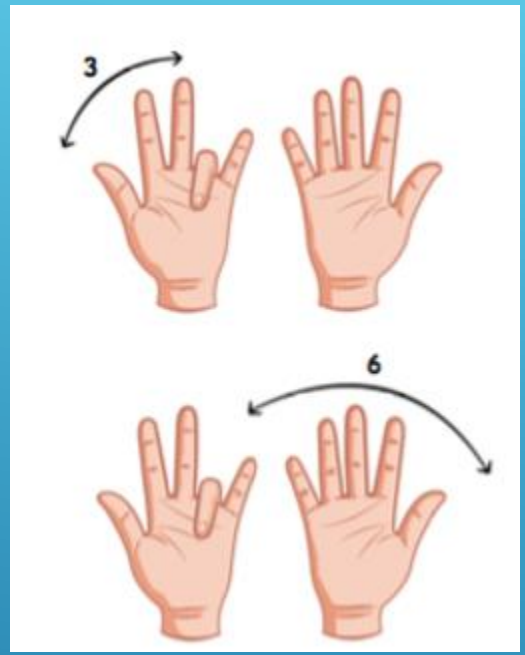
You can:

- Investigate this theory with your child by exploring this rule and finding more patterns. This will familiarise your child with the 9 times tables.

GAMES & TOOLS TO USE WITH YOUR CHILD

9 Times Tables on your Fingers!

1. Hold your hands in front of you with your fingers spread out.
2. For 9 x 4 bend your 4th finger down (like the picture).
3. You have 3 fingers in front of the bent finger and 6 after the bent finger. Thus the answer must be 36!
4. The technique works for the 9 times table up to 10.



You can:

- Explore with your child which method helps them most with the 9 times table – the more physical hand trick, or the more visual exploration of number patterns.

GAMES & TOOLS TO USE WITH YOUR CHILD

Bingo!

This game will need 2 players!

Make a grid of six squares on a piece of paper and ask your child to write a number in each square from the target tables. Give them a question and if they have the answer, they mark them off. First one to mark off all their numbers is the winner!

You can:

- Turn this into a family game and include a reasonable reward/incentive to entice your child.

GAMES & TOOLS TO USE WITH YOUR CHILD

Super Fingers!

This is a game for two players!

The game is basically a version of rock, paper, scissors but with numbers. Two players count to 3 and then make a number using their fingers.

Both players then have to multiply both numbers together and the quickest wins.

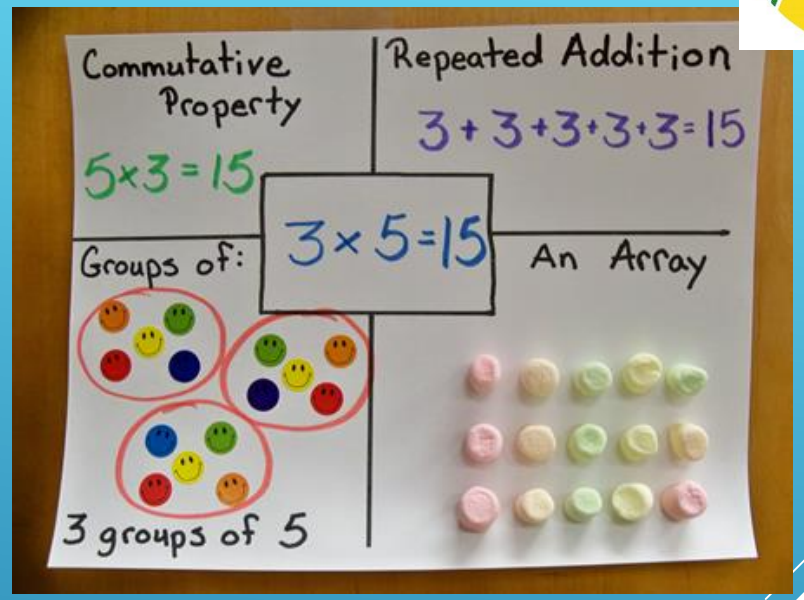
You can:

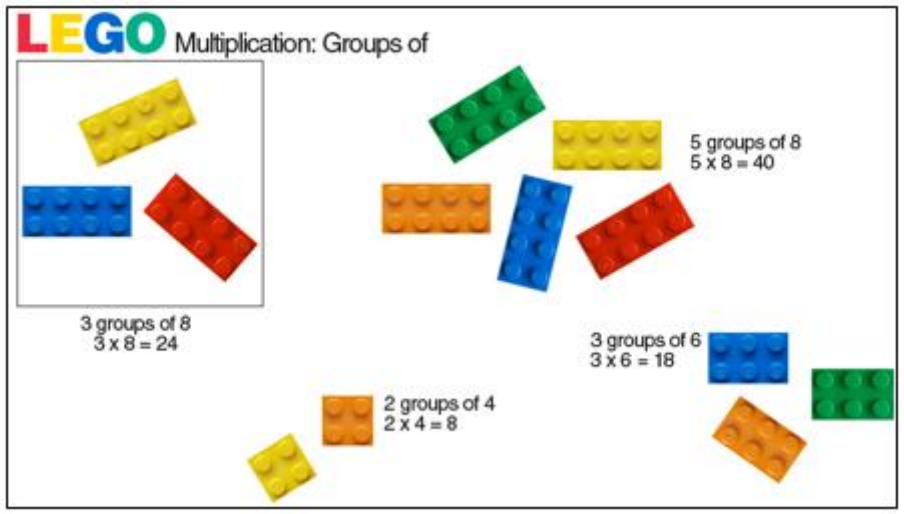
- Adapt other games to focus on multiplication tables, or create some totally new tables games with your child.
- Start the game by giving children a copy of the times table to refer to if they need it. Then, when they're ready for the challenge, they can try the game without.

GAMES & TOOLS TO USE WITH YOUR CHILD

Concrete Pictorial & Abstract Approach (CPA)

Manipulation of physical resources and construction of pictorial representations before conquering the abstract understanding of times tables is extremely valuable. Multiplication has a strong presence in our day-to-day life. Look for opportunities to use them when problem-solving when shopping or using recipes. In order for maths experiences to be effective children need to be able to work with and manipulate practical materials.





You can:

- Organise a multiplication array hunt. Exploration of arrays will increase your child's understanding of multiplication.

ONLINE RESOURCES TO USE WITH YOUR CHILDREN

- www.timestables.co.uk - A great range of activities to build knowledge, confidence & speed
- https://www.youtube.com/watch?v=9XzfQUXqiYY – Times tables songs
- www.educationcity.com – Ideal for learning multiplication facts
- www.ttrockstars.com – TT RockStars, great for increasing speed of recall
- www.topmarks.co.uk – Hit the Button times tables game
- http://resources.woodlandsjunior.kent.sch.uk/maths/timestable/interactive.htm - access to a range of activities

ANY QUESTIONS?