



MULTIPLICATION TABLES CHECK

MONDAY 24TH FEBRUARY 2020

WHY ARE TIMES TABLES IMPORTANT?

Times tables are the nuts and bolts of mathematics.

They are key to mastering many concepts such as:

- Multiplication
- Division
- Fractions
- Algebra
- And many, many more...



Rapid recall of times table facts frees up space in the children's brain and helps to avoid brain overload.

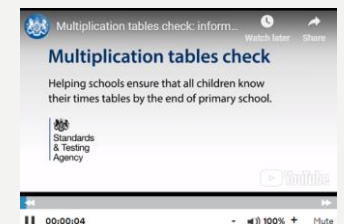
WHAT IS THE MTC?

- From June 2020, schools in England are required to administer an online multiplication tables check (MTC) to year 4 pupils.
- Pupils will take the check at the end of year 4.
- The national curriculum specifies that by year 4, pupils should be able to recall the multiplication tables up to and including 12×12 .
- The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics.
- It will help us to identify pupils who have not yet mastered their times tables, so that additional support can be provided.

WHAT DOES THE MTC LOOK LIKE?

- The MTC assesses times tables up to 12 through a set of timed questions.
- Pupils will answer 3 practice questions before the check begins.
- The check consists of 25 questions.
- Pupils will have 6 seconds to answer each question, with a 3-second pause between questions.
- Answering at speed is key to assessing fluent recall of multiplication tables; this has been set to allow pupils the time required to demonstrate their recall of multiplication tables, whilst limiting their ability to work out answers to the questions.

Click me



FORMAT

- The MTC will consist of multiple, equivalent sets of questions (or 'forms') and each pupil will be randomly assigned one of these.
- If, for any reason, a pupil needs to restart the check, they will be randomly assigned a different set of questions.
- Each set consists of 25 questions worth one mark each.
- Questions will all follow the same format. $n1 \times n2 =$
- Items are not ordered according to difficulty.
- As all questions follow the same format and require the same recalling of facts from long term memory, and the same type of response, all questions are considered to have the same level of cognitive demand and are therefore not rated individually.

ASSESSMENT CONTENT

- Items will be selected from the 121 items that make up the 2 to 12 multiplication tables.
- In order to check if pupils have fluent recall of the multiplication tables, a breadth of items will be included in each check.
- There is an emphasis on the 6, 7, 8, 9 and 12 multiplication tables because these have been determined to be the most difficult multiplication tables (and are taught in Key Stage 2).

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

ARRANGEMENTS FOR THE MTC

- Schools will have a 3-week window to administer the MTC.
- Teachers will have the flexibility to administer the check to individual pupils, small groups or a whole class at the same time.

Audible time alert

A beep that sounds two seconds before the end of each question, and at the end of each question.

Colour contrast

Change the font and background colours.

Font size

Increase or decrease the size of the font and number pad on the screen.

Input assistance

An input assistant is someone who enters answers dictated by the pupil. An input assistant can be used when a pupil is physically:

- unable to enter their own answers
- able to input but inputting causes physical discomfort
- able to input but inputs very slowly
- able to input but finds inputting very difficult

'Next' button between questions

Instead of a 3-second pause between questions, the pupil can press a 'Next' button when they are ready for a new question. There is a 30-minute time limit to complete the check

Question reader

The screen reader will read out all text displayed on screen in the MTC. This includes instructions and questions. Please note, the MTC does not support third-party screen readers. All pupils requiring this functionality will need to use the in-built screen reader due to compatibility with the timed function.

Remove on-screen number pad

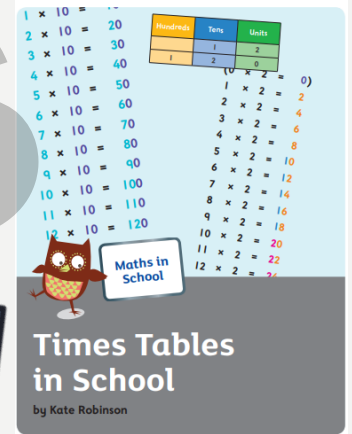
Only the question and answer box will show on screen.

HOW DOES SCHOOL SUPPORT LEARNING TIMES TABLES?

- Daily practise of the tables.
- Teaching the patterns of times tables.
- Time in lessons for the children to use Times Table Rock Stars.
- Monitoring which tables each child needs to work on.
- Staggered approach to learning the tables:
 - Year 1: Counting in multiples of 2, 5 and 10
 - Year 2: Recall of 2, 5 and 10 times tables
 - Year 3: Recall and use the facts of 3, 4 and 8 tables
 - Year 4: Recall and use multiplication and division facts for tables up to 12×12 .

HOW CAN I SUPPORT MY CHILD?

- Chanting (saying) the multiples of the times tables all the way up to 12 times the number 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72
- Using the booklet to support pattern spotting within the times tables.
- Asking the children quick fire questions on a specific times tables until they are secure with that one e.g. the 6's.
- Playing times table songs from YouTube.
- Repetition of times tables facts.
- A **pack of cards** – take out the aces and Kings, count Jack as 11 and Queen as 12, and you can practise the full range of tables by dealing your child two cards and asking them to multiply them.
- Praise!



HOW CAN I SUPPORT MY CHILD?



Below is a rough monthly guide on how the makers of Times Tables Rock Stars have suggested that children could prepare for the MTC. Please remember this is a *recommendation* and is not set in stone.

- **February** - 10 minutes a week in the Garage. If they're on Auto, they should aim to have passed level 308 by the end of the month. Focusing on the 7s and 8s.
- **March** - 15 minutes a week in Garage. If they're on Auto, they should aim to have passed level 365 by the end of the month. Focusing on the 9s.
- **April** - 15 games a week in Garage. If they're on Auto, they should aim to have passed level 420 by the end of the month. Focusing on the 11s and 12s.
- **May** - 10 minutes a week in Studio and 5 minutes a week in Soundcheck, which is our simulator for the MTC.
- **June** - 3 games per day in Soundcheck.

WEBSITES TO SUPPORT TIMES TABLES

- <https://www.topmarks.co.uk/maths-games/hit-the-button>



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



- <https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check>



- <https://play.ttrockstars.com/auth/school/student/22290>



- https://assets.oxfordowl.co.uk/2014/05/13/10/30/08/349/PX_MathsContent_BK_TimesTablesInSchool_01_C_H.pdf

