

# Year 4 Multiplication Times Table Check

Information for Parents: Tuesday 31st January 2023







## During this presentation, we will look at:

The purpose of the check

When and how it will be carried out

Arrangements for the check

The content and structure of the check

What we are doing at school to help prepare the children

How you can support your child at home

Useful resources



# What is the purpose of the multiplication times table check?



To establish whether year 4 pupils can fluently recall their multiplication tables which is essential for future success in mathematics



- To help schools identify pupils who require additional support
- There is no 'pass' rate or threshold

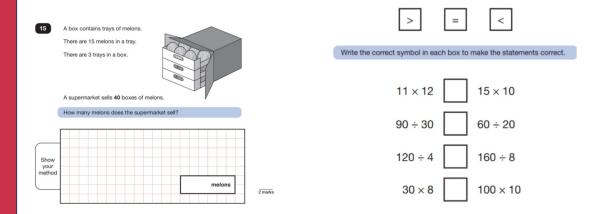


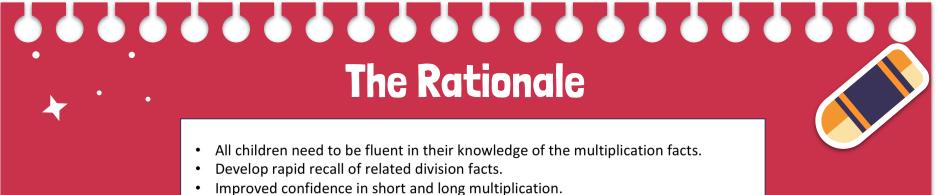
The DfE will create a report on overall results across all schools in England to measure improvements



### The Rationale

- All children need to be fluent in their knowledge of the multiplication facts.
- Develop rapid recall of related division facts.
- Improved confidence in short and long multiplication.
- Improved fluency in arithmetic operations.
- SATs









When will the multiplication times table check be carried out?



All eligible Year 4 pupils in England will take the check within a 3 week window in June.

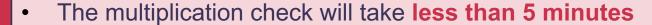
It is up to individual schools to decide how the check is administered.

# How will the multiplication times table check be carried out and what will it look like?

- The check will be **digital** and take place on screen
- Answers will be entered using a keyboard or by pressing digits or touchscreen using an on-screen number pad
  - Children will use their Chromebooks to complete the check



#### What will the check look like?



- Children will get 6 seconds to input their answer
- Whatever is written in the answer box at the end of 6 seconds will be counted as the answer
- There will be **25 questions** with a 3 second pause in-between questions
- The check will take place in class with the class teacher
- There will not be related division facts
- Pupils will not see their results when they complete the check



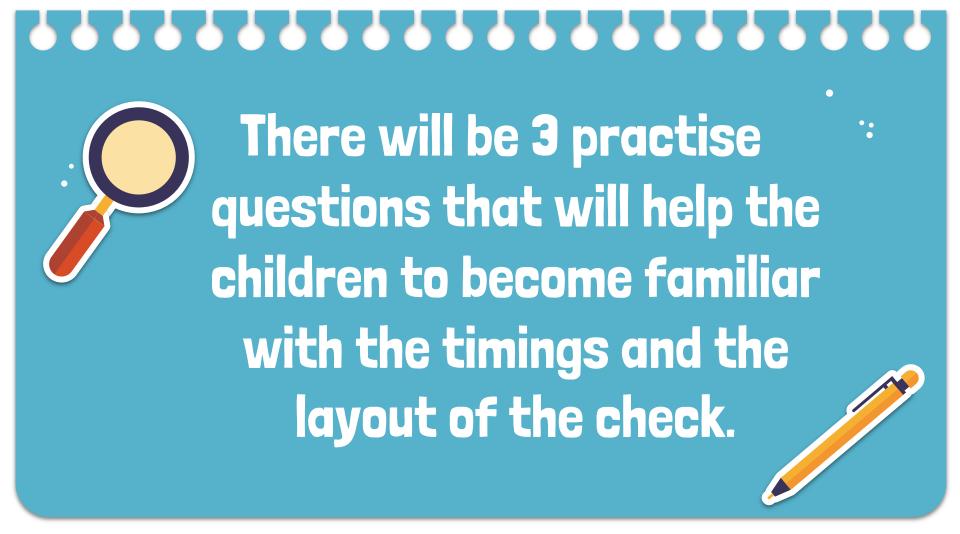


### What will it contain?

• There will always be questions from the 3, 4, 5, 6, 7, 8, 9, 11 and 12 multiplication tables in each check.

- There will be no questions from the 1 times table (i.e. 1 x 8 or 8 x 1).
- The 6, 7, 8, 9 and 12 times tables are more likely to be asked.
- There will only be a maximum of 7 questions from the 2, 5 and 10 times tables.
- Reversal of questions will not feature in the same check for example  $8 \times 6 = 6 \times 8$







There are several access arrangements available for the check, these can be used to support pupils with specific needs. Your child's teacher will ensure that the access arrangements are appropriate for your child before they take the check in June.

The check has been designed so that it is inclusive and accessible to as many children as possible, including those with special educational needs or disability (SEND) or English as an additional language (EAL). However, there may be some circumstances in which it will not be appropriate for a pupil to take the check, even when using suitable access arrangements. If you have any concerns about your child accessing the check, we will be able to advise you on the actions available

# What happens before the check?



#### Teaching times tables facts first:

**Counting and looking for patterns** 

**Multiplication is commutative** 

Multiplication is the inverse of division

**Number families** 

**Use of different representations** 

Concrete manipulatives such as counters or multilink

cubes

Pictorial representations such as arrays



### How are we helping the children to learn facts in school?

Counting and looking for patterns

E.g. Counting in 2s: 2, 4, 6, 8, 10...

X

When they are confident, they can look for patterns

E.g. 4 x 8 is the same as 4 x 4, doubled

https://www.youtube.com/watch?v=aoUidm704PU



: How are we helping the children to learn facts in

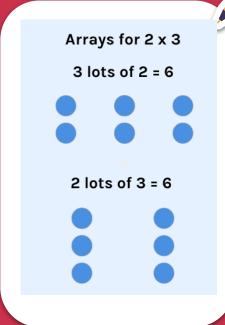
school?

#### Multiplication is commutative

E.g.  $3 \times 2$  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



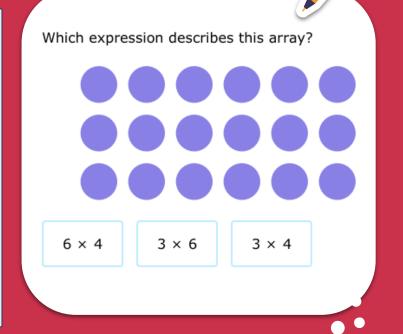
# : How are we helping the children to learn facts in

school?

#### 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.



# : How are we helping the children to learn facts in school?

#### **Using known facts**

By using known facts from 'easier' times tables, children should be able to find answers with increasing speed

$$7 \times 12 = ?$$

I know 
$$7 \times 11 = 77$$
  
Therefore,  $77 + 7 = 84$ 

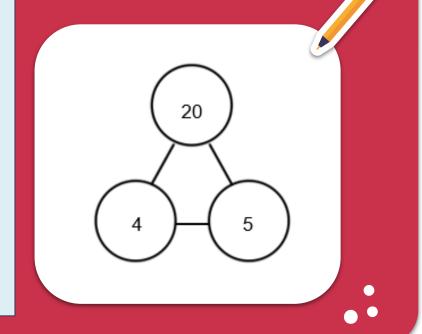
## : How are we helping the children to learn facts in

school?

#### **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



# **Online Maths**

# Frame

Free resource that gives you an indication at the speed at which the questions are asked

#### **Multiplication Tables Check**

This activity exactly mirrors the 'Multiplication Tables Check' that will be given to children at the end of Year 4. They are tested on their multiplication tables up to 12 x 12. There are twenty-five questions and children have six seconds to answer each question and three seconds between questions. The questions are generated randomly using the same rules as the 'Multiplication Tables Check' (see below).

Results can be downloaded and printed at the end of the test.

A similar activity which tests recall of number bonds can be found here.

For more multiplication games click here.

| Multiplication<br>Table | Minimum number<br>of items in each<br>form | Maximum number<br>of items in each<br>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  |  |  |

| MAIN MENU MITTUITE                              | ation Tables | Check         | Time          | left: 2 |  |  |  |  |
|---|--------------|---------------|---------------|---------|--|--|--|--|
| 3 x 8 = 24                                      |              |               |               |         |  |  |  |  |
|   |              | 1             | 2             | 3       |  |  |  |  |
| F   | Play game    | 4             | 5             | 6       |  |  |  |  |
|   |              | 7             | 8             | 9       |  |  |  |  |
| Time allowed: 6 seconds<br>Tables selected: All |              | $\boxtimes$   | 0             | ENTER   |  |  |  |  |
| Question 1 of 25                                | THSFRAME     | $\overline{}$ | $\overline{}$ | _       |  |  |  |  |



YouTube Video Link



#### **Online-Times Tables Rockstars**

Each child has their own unique login Highly engaging and the children really enjoy it!

Teachers can monitor and view each child's progress







Online-Times
Tables Songs





Written
Multiplication
Grids

| ×  | 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 |

| PRIN |   | Speed Tables |   |   |   |   |   |   |          | CHANGE |  |  |
|------|---|--------------|---|---|---|---|---|---|----------|--------|--|--|
| Х    | 5 | 4            | 8 | 9 | 7 | 3 | 1 | 2 | 10       | 6      |  |  |
| 8    |   |              |   |   |   |   |   |   |          |        |  |  |
| 5    |   |              |   |   |   |   |   |   | 0 14     |        |  |  |
| 9    |   |              |   |   |   |   |   |   | 0 0      |        |  |  |
| 4    |   |              |   |   |   |   |   |   |          |        |  |  |
| 6    |   |              |   |   |   |   |   |   |          |        |  |  |
| 1    |   |              |   |   |   |   |   |   |          |        |  |  |
| 7    |   |              |   |   |   |   |   |   | 13 12. 0 |        |  |  |
| 10   |   |              |   |   |   |   |   |   |          |        |  |  |
| 3    |   |              |   |   |   |   |   |   |          |        |  |  |
| 2    |   |              |   |   |   |   |   |   |          |        |  |  |

Developed by Mark Cogan at www.primarygames.co.uk

Time Taken:



### How else can I support my child?

**........................** 



Firstly, a positive attitude goes a long way — so as much encouragement and support as possible (but we don't need to tell you that)!



#### Some further tips:

- Make times tables fun;
- Climb stairs counting in multiples
- Play verbal times tables games
- Listen to and learn times tables songs
- Play online maths games





The check will focus on what they know about times tables.

It doesn't reflect their understanding of wider mathematical topics.

The check is only 5 minutes long
For most children, the check will last for a maximum of 5 minutes. When they have finished, they will not need to repeat the check, regardless of their final score.