



Year 4 Multiplication Check Parent Workshop



30.01.2025



Miss Newson
Mr Lockwood





Aims of the session

- To understand the purpose of the Year 4 multiplication check
- To understand our approach to the check
- Useful learning strategies
- Times Tables Rockstars
- Data





Multiplication Check



In the Summer term of year 4, children complete a **multiplication check**.

This is where they are asked to demonstrate their times tables knowledge.

This is a **government requirement** and so it is important all children readily know their times tables by the end of year four.

We will be teaching the children their times tables and will be providing regular practise opportunities. However, we also recommend they spend some time at home practising, whether this is on **times tables rockstars**, singing along with a song or chanting it out loud.

Our approach: All children must learn times tables by the end of Year Four as they are so important for all Maths Learning and future assessments in Year Six.





Multiplication Check

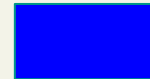


- One practise question, before they start (does not count towards marks)
- 25 questions
- All must be answered correctly
- Children have 6 seconds to answer
- This checks children's mental arithmetic
- The 'check' resembles the same format as times table rockstars
- Children will complete this in small groups
- Children will complete their check on a chromebook
- This will be completed across a two week period.
- (2nd June - 13th June)





Multiplication Check



In extreme circumstances there may be reasons why a child does not take the multiplication check.

This decision is made by the headteacher. The decision by the headteacher is final.

The Government says a pupil should not take the multiplication check if:

- they are unable to participate, even when using access arrangements
- they are unable to answer the easiest questions or are working below the **national curriculum expectation** for year 2 in multiplication tables
- they have just arrived in school during the check period and there is not enough time to establish the pupil's abilities

If your child is absent from school for the whole 'check' period, we have to officially record the reason for the absence.

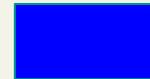
This is only recorded if the child would have ordinarily been able to take the check.

Schools can also record a pupil as not taking the check if they:

- are absent and therefore the school is unable to administer the check during the check window
- have left the school
- appear on the register in error



Multiplication Check



Access arrangements may be appropriate for pupils with specific needs who require additional arrangements so they can take part in the Multiplication Check.

This includes pupils:

- with an education, health and care plan (EHCP)
- for whom provision is being made in school using the special educational needs and disability (SEND) support system
- whose learning difficulty or disability significantly affects their ability to access the check
- who have behavioural, emotional or social difficulties
- with English as an additional language (EAL) and limited fluency in English

The support given should be based on normal classroom practice.

If access arrangements are granted, pupils should familiarise themselves with access arrangements using the 'try it out' check to ensure the arrangements meet their needs before taking the official check.

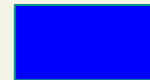
If access arrangements have been enabled for a pupil, the arrangements will automatically be available to the pupil in the 'try it out' check and the official check.

When the pupil signs in, they will see a list of the access arrangements enabled.





Multiplication Check



If access arrangements are granted these are the things that can be adjusted

Colour contrast

The standard version of the check includes black text on a white background. If colour contrast is enabled for a pupil, at the start of the 'try it out' and official check they will be able to change the text and background colours to one of the following combinations:

- yellow on black, black on blue, black on peach, blue on cream

Font size

At the start of the 'try it out' and official check they will be able to increase or decrease the size of the text and number pad on the screen.

Pause 'next' button between questions

The standard version includes 3 seconds pause between questions.

If this is not long enough, or the pace of the check may disadvantage the pupil, a 'Next' button can be enabled.

Instead of 3 seconds pause, the pupil can select 'Next' when they are ready to start a new question.

There is a 30-minute time limit to complete the check using this access arrangement.

Please note this access arrangement does not extend the time given to answer each question.





Multiplication Check



Remove on-screen number pad

Enabling this feature will remove the on-screen number pad. This may be useful to support pupils who are distracted by it or do not plan to use it. Only the question-and-answer box will show on the screen. The pupil will need a keyboard to enter their responses.

Input assistance

An input assistant is someone who enters answers dictated by the pupil. The input assistant must enter their name at the start of the official check and then accurately input the answers dictated by the pupil.

Audio version

If the audio version is enabled, it will read aloud all text displayed on the screen.

Audible time alert

Pupils with a visual impairment may not be able to see the on-screen question timer. If the audible time alert is enabled for a pupil, a beep will sound 2 seconds before the end of each question, then a different beep will sound to signal the end of each question.

Additional time

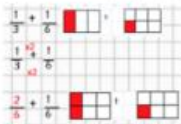
Pupils cannot have additional time to complete the multiplication check questions.



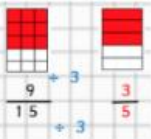


Adding, subtracting, multiplying and dividing fractions

$$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

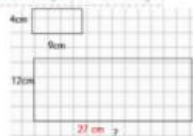


Simplifying fractions

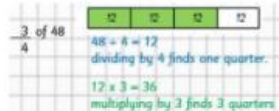


Using scale factors

2 people	1 person	5 people
6 eggs	$6 \div 2 = 3$ eggs	$3 \times 5 = 15$ eggs
100g flour	$100 \div 2 = 50$ g	$50 \times 5 = 250$ g



Finding a fraction or a percentage of a number

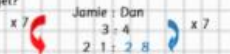


Calculating volume



Calculating ratio

A prize is shared in a ratio of 3:4 between Jamie and Dan. If Jamie gets £21, how much will Dan get?



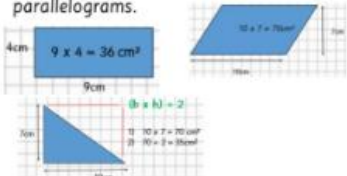
Using known facts

If $3 \times 2 = 6$, then
 $3 \times 20 = 60$
 $30 \times 2 = 60$
 $30 \times 20 = 600$

Using algebraic rules

1st term:	$5 \times 1 - 4 = 1$
2nd term:	$5 \times 2 - 4 = 6$
3rd term:	$5 \times 3 - 4 = 11$
4th term:	$5 \times 4 - 4 = 16$
5th term:	$5 \times 5 - 4 = 21$

Finding the area of rectangles, triangles and parallelograms.

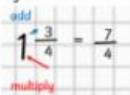


Why are times tables useful?

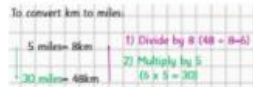
Short and long division



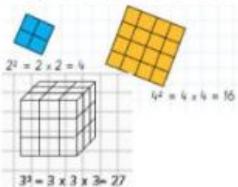
Converting between mixed and improper fractions



Convert between miles and kilometres



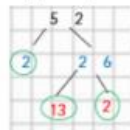
Square and cube numbers



Factors and common factors



Finding prime factors



Ordering and comparing fractions

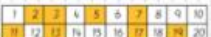


Finding equivalent fractions



Identifying prime and composite numbers

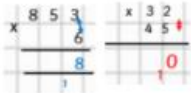
A prime number is a whole number greater than 1 with no divisors except 1 and itself



Multiples and common multiples

Multiples of 3: 3, 6, 9, 12, 18, 21, 24
Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

Short and long multiplication



Number facts



What are number facts?

Number facts are simple calculations with two numbers. They could be addition, subtraction, multiplication or division. Sometimes these can be called fact families.

Number bonds (like $3 + 7 = 10$, or $9 - 4 = 5$) or facts learned from times tables (like $4 \times 6 = 24$ or $27 \div 3 = 9$) are number facts.

How can number facts help you find new answers?

It is good to learn number facts so you can use them quickly. This can really help when you've got a more difficult problem.

Remembering your number facts will help you do these calculations quickly so there will be less chance of getting lost or mixed up.





How many times tables do I need to learn?



1 times table	
1 x 1 = 1	
2 x 1 = 2	
3 x 1 = 3	
4 x 1 = 4	
5 x 1 = 5	
6 x 1 = 6	
7 x 1 = 7	
8 x 1 = 8	
9 x 1 = 9	
10 x 1 = 10	
11 x 1 = 11	
12 x 1 = 12	

12 tables to learn

8 times table	
6 x 8 = 48	
7 x 8 = 56	
8 x 8 = 64	
9 x 8 = 72	
11 x 8 = 88	
12 x 8 = 96	

6 tables to learn

2 times table	
2 x 2 = 4	
3 x 2 = 6	
4 x 2 = 8	
5 x 2 = 10	
6 x 2 = 12	
7 x 2 = 14	
8 x 2 = 16	
9 x 2 = 18	
10 x 2 = 20	
11 x 2 = 22	
12 x 2 = 24	

11 tables to learn

6 times table	
6 x 6 = 36	
7 x 6 = 42	
9 x 6 = 54	
11 x 6 = 66	
12 x 6 = 72	

5 tables to learn

5 times table	
3 x 5 = 15	
4 x 5 = 20	
5 x 5 = 25	
6 x 5 = 30	
7 x 5 = 35	
8 x 5 = 40	
9 x 5 = 45	
10 x 5 = 50	
11 x 5 = 55	
12 x 5 = 60	

10 tables to learn

9 times table	
7 x 9 = 63	
9 x 9 = 81	
11 x 9 = 99	
12 x 9 = 108	

4 tables to learn

10 times table	
3 x 10 = 30	
4 x 10 = 40	
6 x 10 = 60	
7 x 10 = 70	
8 x 10 = 80	
9 x 10 = 90	
10 x 10 = 100	
11 x 10 = 110	
12 x 10 = 120	

9 tables to learn

7 times table	
7 x 7 = 49	
11 x 7 = 77	
12 x 7 = 84	

3 tables to learn

3 times table	
3 x 3 = 9	
4 x 3 = 12	
6 x 3 = 18	
7 x 3 = 21	
8 x 3 = 24	
9 x 3 = 27	
11 x 3 = 33	
12 x 3 = 36	

8 tables to learn

11 times table	
11 x 11 = 121	
12 x 11 = 132	

2 tables to learn

4 times table	
4 x 4 = 16	
6 x 4 = 24	
7 x 4 = 28	
8 x 4 = 32	
9 x 4 = 36	
11 x 4 = 44	
12 x 4 = 48	

7 tables to learn

12 times table	
12 x 12 = 144	

1 table to learn

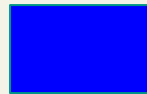
If you already know that $8 \times 4 = 32$, you also know the answer to 4×8 .

The 1 and 10 times tables (and many of the 11 times tables) are easy to work out, so that means there are even fewer to learn!

78



Useful Strategies



These are some strategies that we have taught the children, that can also be used at home.

If you know your 3s you can work out your 6s and 9s.

$2 \times 3 = 6$ **DOUBLE** (6+6) the answer for $2 \times 6 = 12$

2s doubled = 4s

4s doubled = 8s

5s doubled = 10s

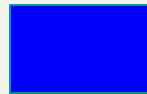
6s doubled 12s

10s halved = 5s

12s halved = 6s



Useful Strategies



These are some strategies that we have taught the children, that can also be used at home.

If a child doesn't know their 9s, they can use their 6s and 9s to help them.

$$\begin{array}{c} 7 \times 9 = \\ \swarrow \quad \searrow \\ 3 \quad 6 \end{array}$$

$$7 \times 3 = 21$$

$$7 \times 6 = 42$$

$$21 + 42 = 63$$

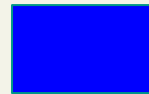
(Add up the tens $20 + 40 = 60$, then the ones $60 + 3$)

Step 1: Partition the 9 into 3 and 6

Step 2: Multiply each part by the other number

Step 3: Add up the two answers

Useful Strategies



These are some strategies that we have taught the children, that can also be used at home.

Calculating the 7s

$$8 \times 7 =$$

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graph TD; 7 --- 2; 7 --- 5;
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$$8 \times 2 = 16$$

$$8 \times 5 = 40$$

$$16 + 40 = 56$$

(add the tens $10 + 40$ then add the ones $50 + 6$)

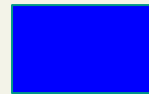
Step 1: Partition the 7 into 2 and 5.

Step 2: Multiply each part by the other number

Step 3: Add the two answers together



Useful Strategies



These are some strategies that we have taught the children, that can also be used at home.

Another strategy for the 9 times table

We do not know 9×7

but we know $10 \times 7 = 70$

Subtract or count back 7 (always the times table we are focusing on)

$$70 - 7 = 63$$

These strategies all support children's learning of times tables but as they approach and carry out their multiplication check we expect the children to be able to readily recall their times tables.





TIMES TABLES ROCK STARS

SINGLE PLAYER



MULTIPLAYER




MATHS BANDS BATTLE


Ends in 3 days




← **SINGLE PLAYER** Game types explained




JAMMING
Take it easy




GIG
Perform once a month



GARAGE
Complete your heatmap



STUDIO
Get a rock status



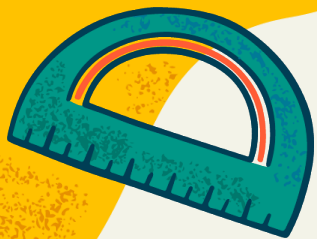
SOUNDCHECK
Beat the clock





Child 1	1	12	6
Child 2	25	25	16
Child 3	5	10	17
Child 21	18	21	59
Child 22	23	25	59
Child 23	25	25	60
Child 24	25	20	60
Child 25	22	22	62
Child 26	23	25	67
Child 27	23	24	71
Child 34	25	25	87
Child 35	25	25	93
Child 36	25	25	101
Child 37	25	25	104
Child 38	25	25	107
Child 39	25	24	118
Child 40	25	25	125





Thank you!

