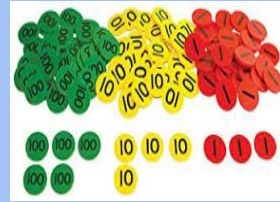
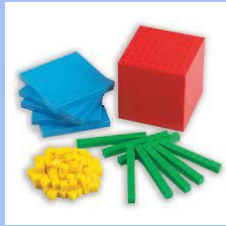


Learning the Multiplication Tables

Information for Parents, Guardians and Carers
Humberstone Infant and Junior Academy

Including information on the Multiplication Check for Year 4 pupils in
June 2022



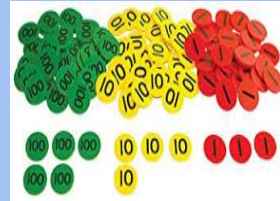
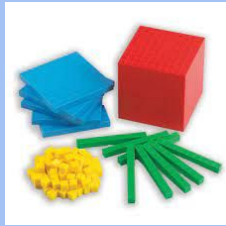
Why learn the Multiplication Tables Facts?

Fluent recall of the multiplication tables facts is essential for future success in mathematics.

There are many practical resources and strategies that we use in school to support children who are learning to recall the multiplication tables.

What your child needs to know

Expectations for times tables for each year group:	
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 multiplication tables, including recognising odd and even numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
Year 4	Recall and use multiplication and division facts for multiplication tables up to 12x12.
Year 5	Revision of all times tables and division facts up to 12x12.
Year 6	Revision of all times tables and division facts up to 12x12.

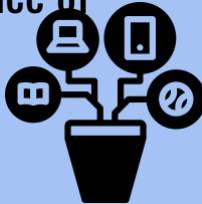


What Parents can do to support their children

Learning the Multiplication Tables facts at home supports children to be more efficient in Maths.

By the end of Year 4 children are expected to know all of their Multiplication Tables facts up to 12 x 12.

We know that parental support and practise at home makes a huge difference to the confidence of children and their ability to recall the Multiplication Tables facts.





1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

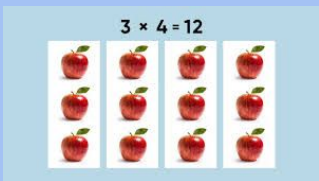
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

How can I support my child to develop fluent recall of the Multiplication Tables facts?

Please practise the Multiplication Tables facts with your child. There are many ways that you can do this:

- Make times tables fun- Climb stairs counting in multiples
- Play verbal times tables games -Listen to and learn times tables songs
- Take it in turns to say different times tables
- Look for patterns in the times tables on a hundred square and in the digits of a set of numbers.
- Learn the corresponding division facts
- Use practical resources such as coins to practise. Lay objects out in arrays.
- Play and practise using online maths games (see link on the last slide)





Counting and looking for patterns

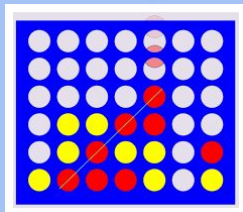
Notice and discuss arrays that can be seen in and around your home.

Counting in lots of/groups

2, 4, 6, 8, 10... 3, 6, 9...

Ensure children have a strong understanding of counting in groups first.

When children are secure with counting, they can then look for patterns.



Looking for patterns in digit columns

Look for patterns in tens and ones digit columns to deepen understanding of the Multiplication Tables facts.

$1 \times 8 = 8$	$6 \times 8 = 48$	$11 \times 8 = 88$
$2 \times 8 = 16$	$7 \times 8 = 56$	$12 \times 8 = 96$
$3 \times 8 = 24$	$8 \times 8 = 64$	
$4 \times 8 = 32$	$9 \times 8 = 72$	
$5 \times 8 = 40$	$10 \times 8 = 80$	

For example:

There is a repeating pattern in the digits column in the 8 x tables.

8, 6, 4, 2, 0, 8, 6, 4, 2, 0, 8, 6, 4, 2, 0

There is a pattern in the tens digit column. Explore whether this pattern continues.

1, 2, 3, 4, 4, 5, 6, 7, 8, 8...

All multiples of 8 are even numbers. Why?

Repeated addition



Knowing that 4×6 is the same as $6 + 6 + 6 + 6$.

4 LOTS OF 6

This can be useful if your child cannot easily remember a list of numbers.

They have the knowledge to add another lot of 6 to the last number in the sequence.

For example:

They know that 3 lots of 6 is 18.

They can then add another 6 to 18 to find 4 lots of 6. $18 + 6 = 24$

They know their 5 times tables.

They know 5 lots of 6 is 30.

(see commutative law on next slide)

They add another 6 to 30 to find 6 lots of 6.

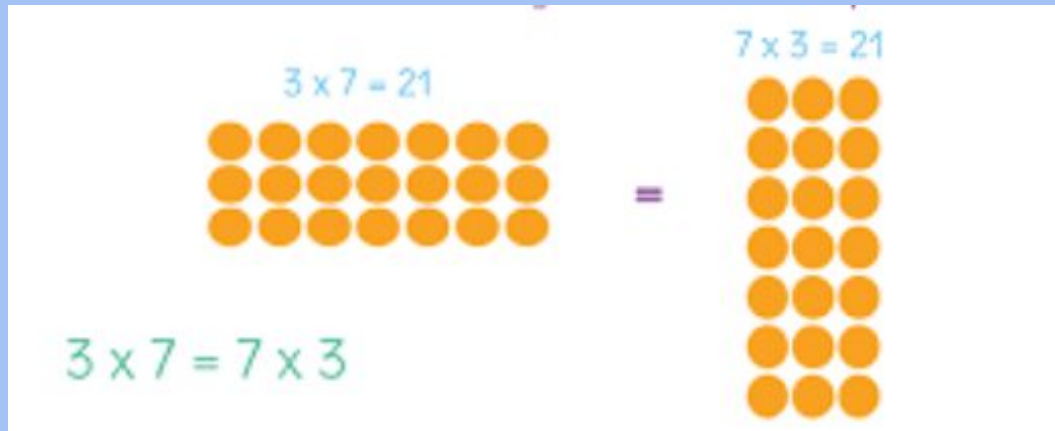
Multiplication is commutative

3×7 is the same as 7×3 .

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.

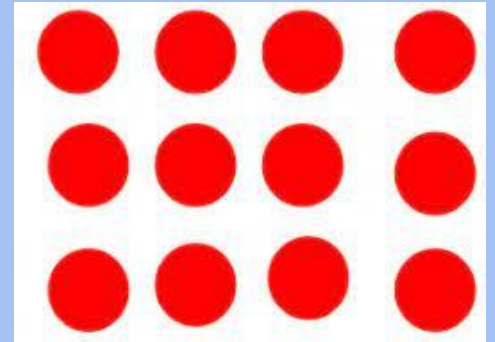
If they are more confident with their $3 \times$ tables facts then they can use the facts they know to answer this question in the $7 \times$ tables.



Multiplication is the inverse of division

$12 \div 3 = 4$ can be worked out because $3 \times 4 = 12$.

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



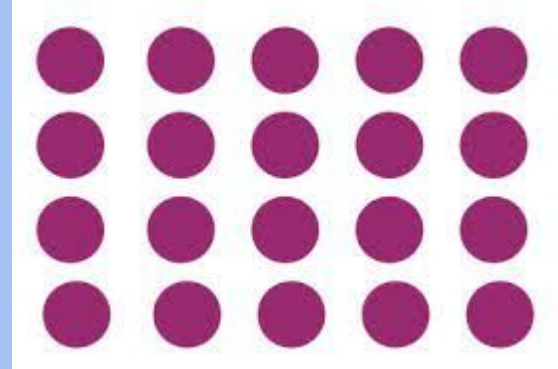
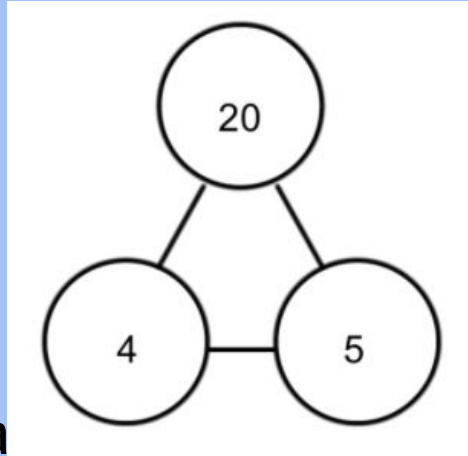
Number families

$$4 \times 5 = 20$$

$$5 \times 4 = 20$$

$$20 \div 5 = 4$$

$$20 \div 4 = 5$$



Due to their understanding of multiplication, children should be able to see how numbers around when multiplying and still get the same answer, children should also be able to see whole number families.

For many children this will need to be pointed out and discussed.

4×5 gives you the same answer as 5×4 . This can be seen if you turn the array of dots.

Using known facts

Using known facts

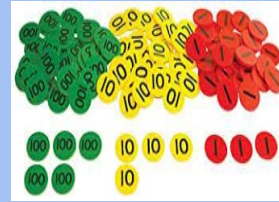
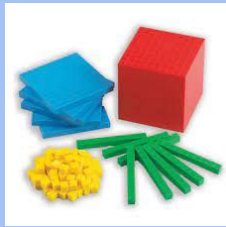
$$12 \times 7 = ?$$

I know $11 \times 7 = 77$

Therefore, $77 + 7 = 84$

I just need to add another lot of 7

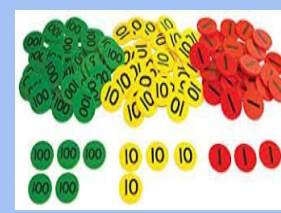
By using known facts from 'easier' times tables, children should be able to find answers with increasing speed.



Year 4 Multiplication Check - June 2022

Please read the linked document:
Information for Parents - 2022 Multiplication Tables Check

<https://www.gov.uk/government/publications/multiplication-tables-check-information-for-parents>



What is the Year 4 Multiplication Check

Every Year 4 pupil will take the check in June

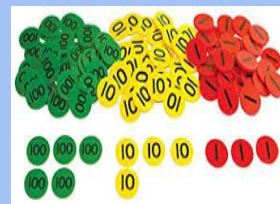
The purpose of the check is to determine whether your child can fluently recall their times tables up to 12, which is essential for future success in mathematics.

It is an on-screen digital check consisting of 25 times table questions.

Answers will be entered using a keyboard or by pressing digits using a mouse or touchscreen using an on-screen number pad.

Your child will be able to answer 3 practice questions before taking the actual check. They will then have 6 seconds to answer each question.

On average, the check should take no longer than 5 minutes to complete.



During the check

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 1×8 or 8×1).

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.

Questions more likely to appear

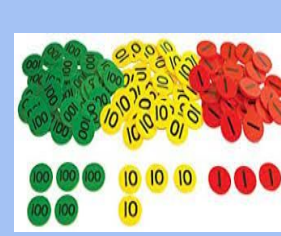
The following 11 multiplication questions are more likely to be asked:

$$6 \times 6, 6 \times 7, 6 \times 8, 6 \times 9, 6 \times 12$$

$$7 \times 8, 7 \times 9, 7 \times 12$$

$$8 \times 9, 8 \times 12$$

$$12 \times 12$$



Example multiplication table check - Year 4 pupils

You can use this free multiplication table check to play and practise. This will give you an idea of the speed at which children will be asked questions:

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

Children are expected to answer all of the questions correctly by the end of Year 4.

Remember to make learning the Multiplication Tables fun.

If you need any help or advice please speak to your child's class teacher.

