Multiplication Times Table Check (MTC)

West Kirby Primary School

Here are the slides from the meeting.

Please note, there is also a recording of the meeting on our website.

Objectives…

- To find out what the Multiplication Times Table Check involves.
- To understand what this means for your child.
- To know how to best support your child.

Background

- Fast recall of times tables equips children to achieve well in mathematics.
- The Multiplication Times Table Check (MTC) is for Year 4 pupils across all schools in England to promote 'rapid recall'.
- The check is compulsory for all schools.
- It will take place **between Monday 3rd June and Friday 14th June.**

National Curriculum expectations

- Year 3 children should be fluent in the 2, 3, 4, 5, 8 and 10 times tables.

- Year 4 children need to be fluent in all times tables up to 12 x 12.

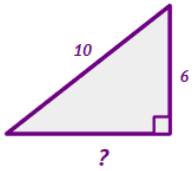
- Pupils in Year 5, Year 6 and beyond are expected to be able to rapidly recall times table facts to solve complex problems.

47 x 28

204 ÷ 17

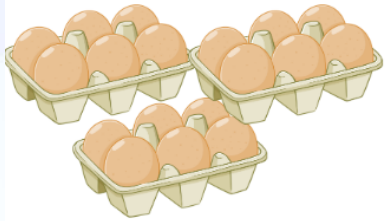
$x^2 + 5x - 24 = 0$

x = 8a + 6b

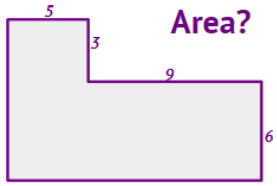


$\frac{5}{9} \times \frac{3}{8}$

How many eggs?



$\frac{2}{3} + \frac{7}{8}$



Area?

About the MTC…

- The check will take place online and will take less than **5 minutes** per pupil to complete.
- Each child will be expected to answer **25 questions** in this time.
- There is a **6 second timer** for each question.
- There will be a **3 second pause between each question.**
- All questions will be presented in the same format

e.g. 3 x 8 = 9 x 7 =

Types of questions...

- There will be **no questions from the 1 times table.**
- Questions from the 2, 5 and 10 times tables are **least likely** to be asked.
- There will always be questions from the **3, 4, 5, 6, 7, 8, 9, 11 and 12** times tables in each test.
- The **6, 7, 8, 9 and 12 times tables** are more likely to be asked than the 2, 3, 4, 5, 10 or 11 multiplication tables.

About the questions…

- 6 x 3 is classed as 6, three times. Therefore 6 x 3 would fall within the 6 times tables.
- Eleven facts (and their reverses) are more likely to appear than others.

  - 6 x 6, 6 x 7, 6 x 8, 6 x 9, 6 x 12
  - 7 x 8, 7 x 9, 7 x 12
  - 8 x 9, 8 x 12
  - 12 x 12

- **It is vital that children are able to recall any multiplication fact instantly and can do so 'out of sequence'** (i.e. 6 x 7 without having count in 6's from 0)

Answering the questions

- Children will have **6 seconds** from the time the question appears on screen to input their answer. This means children must be able **to read, recall and enter their response** within 6 seconds. Whatever is in their answer box at the end of this time will be counted as their answer. e.g. if the answer is 72 and they only input 7 within the time. 7 will be counted as their answer.

- Children can enter their answers using the keyboard or mouse. We are encouraging the children to use the numerical keypad on the right-hand side of the keyboard. Once they get used to this it is much quicker than using the horizontal display above the alphabet.
- Using an iPad is also an option if this helps.

Preparing for the MTC

- Children have been practising their times tables all year.
- Our school website offers links to online times table resources for the children to rehearse their skills. These sites improve computer skills, which is another skill children need to be secure with.
- There is a 'try it out' area for children to become familiar with the style of the times table check, which they will access before the actual MTC.
- All children will need regular practise both at home and at school.

Other information

- The scores will not be available straight away.
- There is no 'Pass' rate or threshold. Children are expected to score 25/25.
- Children will not have to re-sit the check. However, they will need to work hard to catch up, as not being able to recall their times tables will be detrimental to their progress.

How to practice

- Repetition, repetition, repetition
- Retrieval practice (self-testing)
- Little and often
- Focus on the unknown facts
- Make it fun
- Increase speed of recall
- Practice computer skills needed for the check

Instant recall

Ideally, your child will now know all of their times table facts and be able to recall them quickly.

Over the next 6 weeks, we would like your help to increase this speed of recall to make it 'instant' and to practise the computer skills needed for the check.

If there are some times table facts still to learn, here are some of the best ways to master them.

View and read aloud

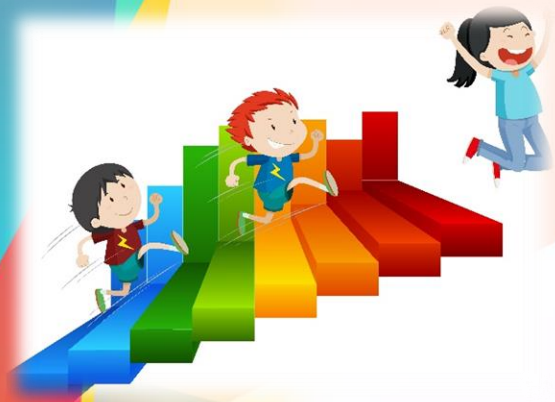
1. Seeing the multiples often is an important first stage.
2. Reciting in order.
3. Recalling out of order.
4. Increasing speed.
5. Focus on unknown facts, not the known.

If this stage is tricky, try missing numbers.

Identify and practise the unknown facts.
Ignoring all of the 1x facts, there are 66 others.

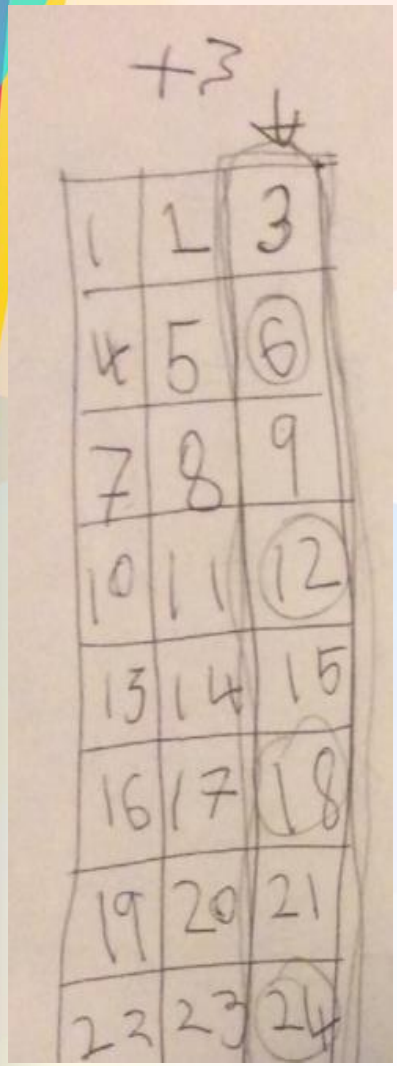
1: 2 x 2	12: 3 x 5	23: 4 x 10	34: 7 x 3	45: 12 x 4	56: 12 x 7
2: 3 x 2	13: 4 x 5	24: 6 x 10	35: 8 x 3	46: 6 x 6	57: 8 x 8
3: 4 x 2	14: 5 x 5	25: 7 x 10	36: 9 x 3	47: 7 x 6	58: 9 x 8
4: 5 x 2	15: 6 x 5	26: 8 x 10	37: 11 x 3	48: 8 x 6	59: 11 x 8
5: 6 x 2	16: 7 x 5	27: 9 x 10	38: 12 x 3	49: 9 x 6	60: 12 x 8
6: 7 x 2	17: 8 x 5	28: 10 x 10	39: 4 x 4	50: 11 x 6	61: 8 x 9
7: 8 x 2	18: 9 x 5	29: 11 x 10	40: 6 x 4	51: 12 x 6	62: 9 x 9
8: 9 x 2:	19: 10 x 5	30: 12 x 10	41: 7 x 4	52: 7 x 7	63: 11 x 9
9: 10 x 2	20: 11 x 5	31: 3 x 3	42: 8 x 4	53: 8 x 7	64: 12 x 9
10: 11 x 2	21: 12 x 5	32: 4 x 3	43: 9 x 4	54: 9 x 7	65: 11 x 11
11: 12 x 2	22: 3 x 10	33: 6 x 3	44: 11 x 4	55: 11 x 7	66: 12 x 11

Fit it in everywhere



1. Walking up / down the stairs.
2. On the way to school.
3. After dinner, before leaving the table.

Pattern spotting

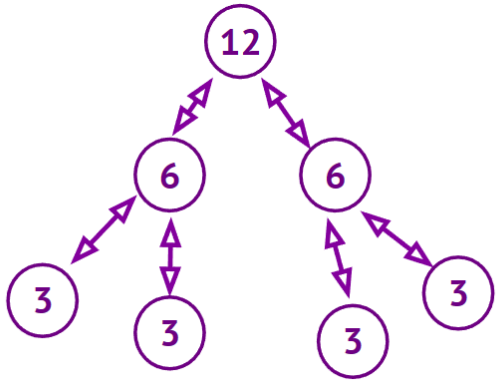


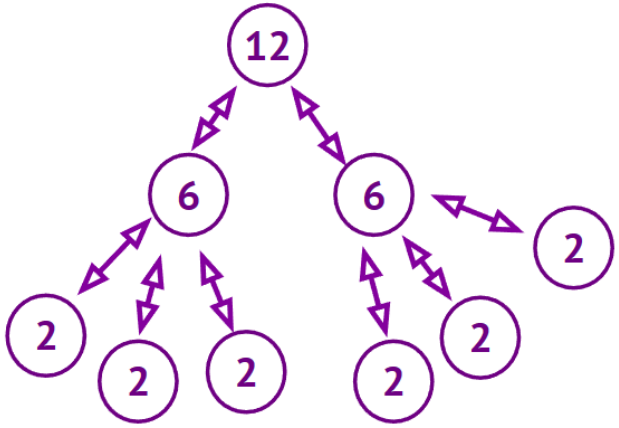
×	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	35	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63
8	8	16	24	32	40	48	56	64	72
9	9	18	27	36	45	54	63	72	81

X	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

Explore connections

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





Games

1 – 12 written on cards

Cards start face down on the table.

As they turn over the card, they multiply that number by their chosen times table.

Try to beat their best time.

Can also be used to master unknown facts.

Moving

- Skipping
- Handclapping
- Balancing
- Keeping up a balloon

Best online resources

Multiplication Tables Check - Mathsframe

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).

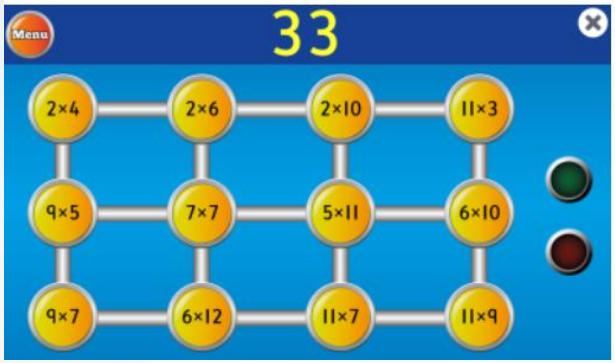
Results can be downloaded and printed at the end of the test.

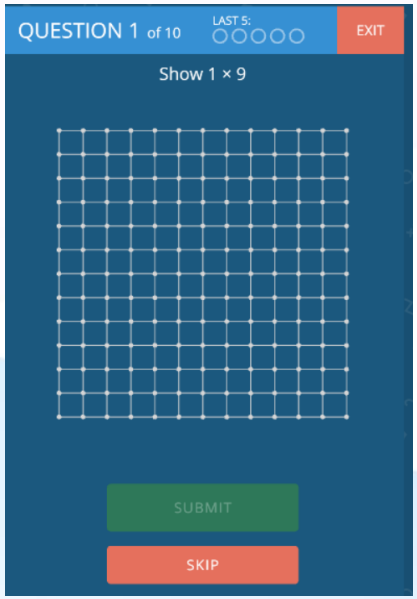
A similar activity which tests recall of number bonds can be found here.

For more multiplication games click here.

Multiplication 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

Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)





Times Tables (completemaths.com)

Best online resources

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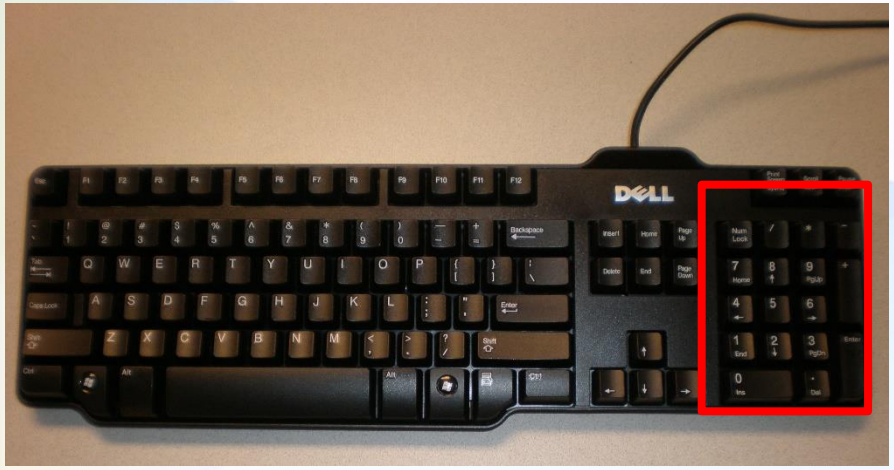
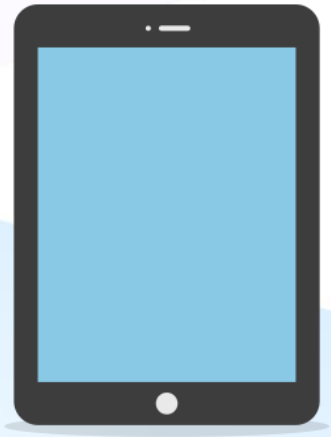




Other ways to practice...

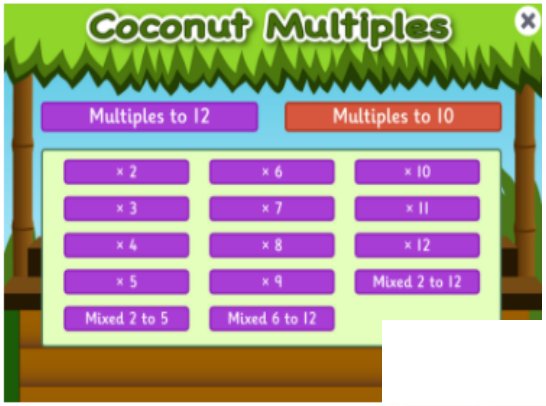
Topmarks | Topmarks Search | Whiteboard Resources

Home › Maths Games › Coconut Multiples

Coconut Multiples

Play Game

Coconut Multiples is a tablet-friendly maths game which can reinforce your knowledge of times tables by helping you to recognise the multiples from each table. They can select either multiples up to either the 12 or 10 times table. Multiples can then be worked on either as individual times tables or mixed.



AGE 6-11 Years

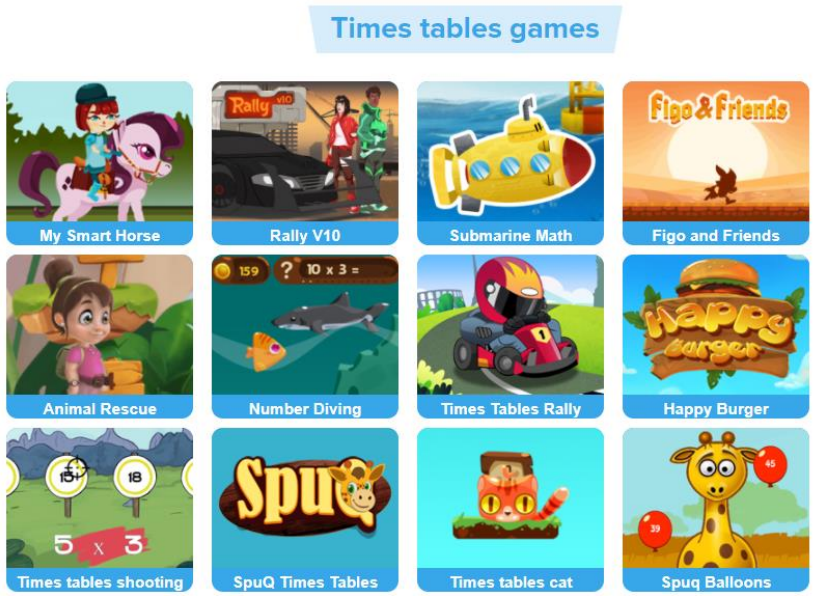
SUBJECTS Maths | Number | Multiplication

Useful as a fun extra,

or as motivation,

But these are not as effective as a learning tool.

For online games, consider the ratio of game : learning.



If times tables are a real challenge...

The national curriculum requires pupils to recall multiplication table facts up to 12×12, and this is assessed in the multiplication tables check. For pupils who do not have automatic recall of all of the facts by the time of the check, fluency in facts up to 9×9 should be prioritised in the remaining part of year 4. The facts to 9×9 are particularly important for progression to year 5, because they are required for formal written multiplication and division.

The 36 multiplication facts that are required for formal written multiplication are as follows.

2×2 3×2 4×2 5×2 6×2 7×2 8×2 9×2	3×3 4×3 5×3 6×3 7×3 8×3 9×3	4×4 5×4 6×4 7×4 8×4 9×4	5×5 6×5 7×5 8×5 9×5	6×6 7×6 8×6 9×6	7×7 8×7 9×7	8×8 9×8	9×9

Thank you for attending today

If you have any questions, please ask.

Or you could email

LKS2@westkirbyprimaryschool.co.uk