

Times Tables

Parent Meeting



Overview

- Curriculum expectations
- Why learn times tables?
- Teaching techniques
- Ways to support at home

Curriculum Expectations

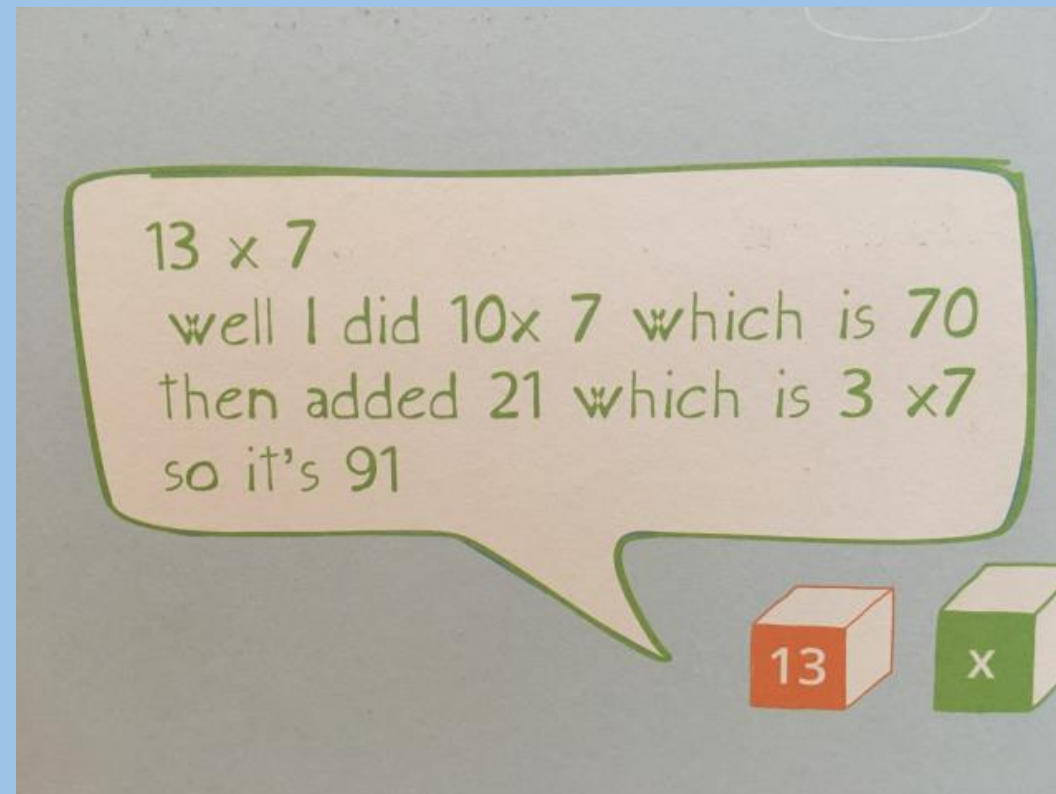
Year	Expectation	Examples
2	10, 5 and 2 times tables	$10 \times 4 = \square$ $28 \div 2 = \square$ $\square \div 5 = 9$ How many 2s in 24?
3	10, 5, 2, 4, 8 and 3 times tables	$8 \times 4 = \square$ $16 \div 4 = \square$ $21 \div \square = 3$ How would you use $5 \times 3 = 15$ to work out 50×3 ?
4	10, 5, 2, 4, 8, 3, 6, 9, 7, 11 and 12 times tables	$7 \times 6 = \square$ $54 \div 9 = \square$ $32 \div \square = 8$ $0.2 \times 8 = \square$ $320 \div 4 = \square$
5 & 6	Application of all times table facts to 12 x 12	$96 \div 12 = \square$ $9^2 = \square$ $9,000 \times 12,000 = \square$ $0.7 \times 0.7 = \square$ $540 \div \square = 60$

The Department for Education has introduced a Times Table Check for children in Year 4.

Why learn them?

- Being fluent in your times tables is **essential** for success in Mathematics and helps to master key mathematical concepts.
- Children who can't recall their times tables struggle in all areas of mathematics, due to cognitive overload.
- Automaticity with facts is essential so the mind is free to think about more complex maths concepts.
- Children should meet the benchmark of knowing their times tables up to 12×12 before moving up to Upper Key Stage 2.
- Evidence states that there is a fairly strong positive correlation between Year 4 MTC scores and KS2 Maths SATs scores.

BUT knowing your times tables is so much more than just memorisation. Children aren't just thinking "I know this fact" but "I know this fact therefore I can work out this..."



The Multiplication Times Table Check (MTC)

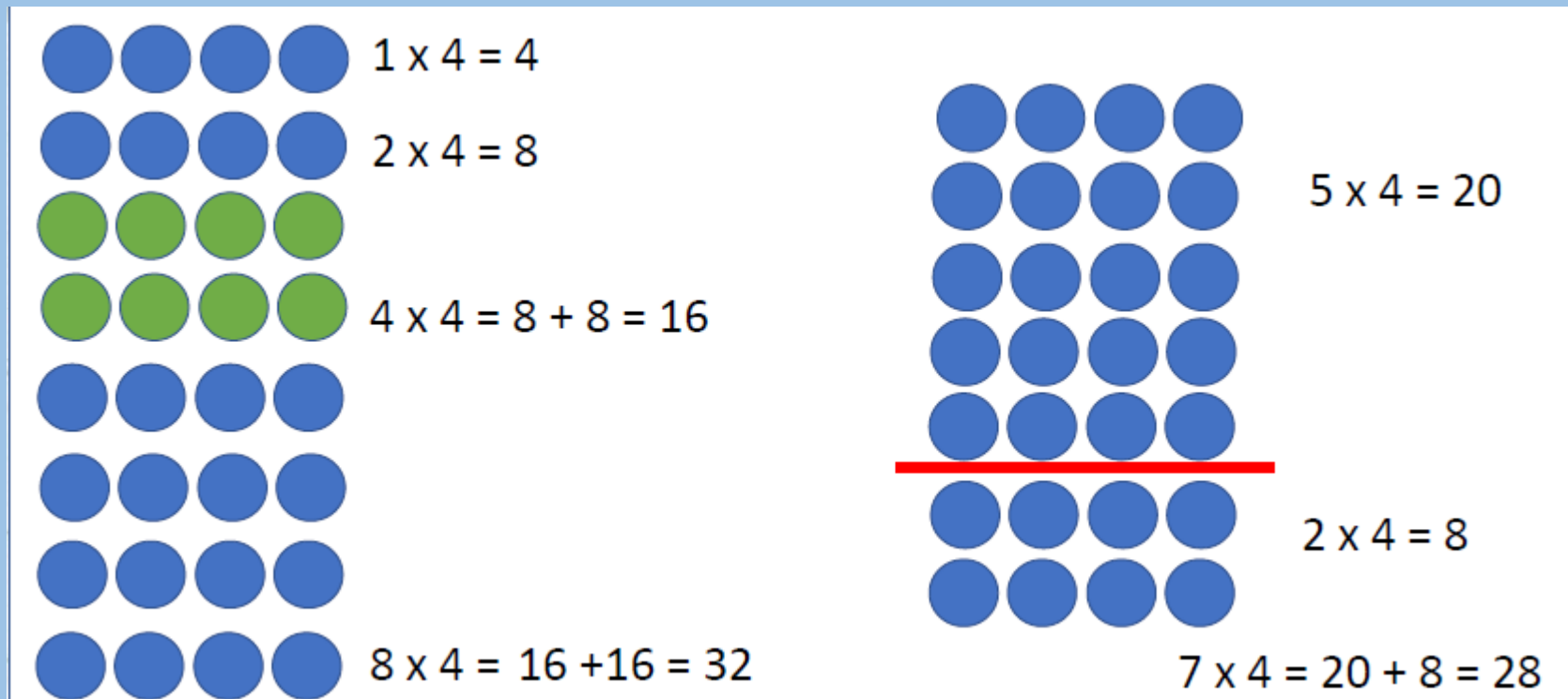
In June 2020 it became compulsory for all English schools to assess times tables knowledge of Year 4 pupils.

How are children tested?

- Children will be tested using **an on-screen assessment**.
- **25 questions**.
- They will have **6 seconds** per question, with a 3 second pause between each question.
- The test will last **no longer than 5 minutes** and their answers will be marked instantly.
- This assessment will take place within a 3-week check window, starting from **Monday 7th June 2027**.
- Only multiplication statements will be included, ranging from 2x2 up to 12x12, with more questions from the 6,7,8,9 and 12 times tables.
- 'Try it out area' will help to familiarise children with the check.

Teaching Techniques

- How do we do that in school?



Teaching Techniques

Pattern spotting Exploring the rich patterns of multiplication deepens conceptual understanding and makes it fun/visual.

Patterns with
multiples $\times 10$

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

- Multiples of 10 always end in 0.

Patterns with multiples x2

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

- Multiples of 2 are always even numbers

Patterns with multiples x5

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

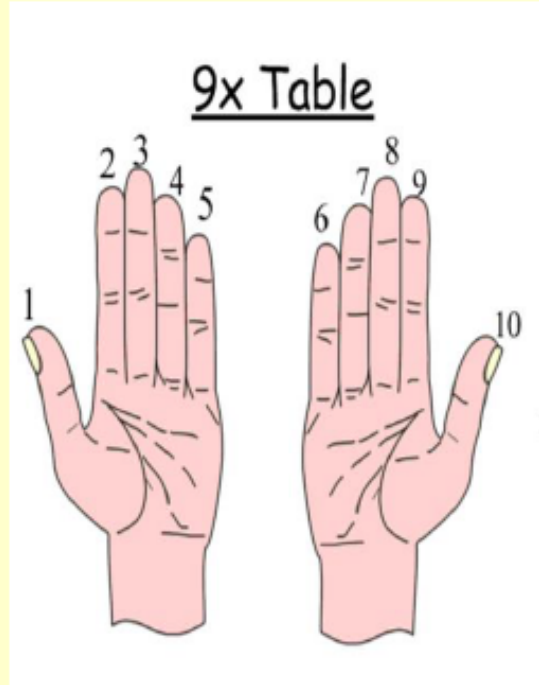
- Multiples of 5 end with a 5 or 0.

Patterns with multiples x3

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

- The digits of multiples of 3 always add together to make a multiple of 3, e.g.
 $27 \quad 2 + 7 = 9$

9x Table



- Works for up to 10×9
- Put the finger down for the multiple, e.g. 3 for 3×9 .
- The fingers to the left of the put down finger are the tens (2), the fingers to the right are the ones (7)
- $3 \times 9 = 27$

How can I help at home?

Reinforcing the importance of times tables

- Make it fun and even a little competitive with times tables games!
- Having times tables displayed at home
- Chanting: “6, 12, 18, 24...”
- Chanting in reverse order: “108, 99, 90, 81 ...”
- Using times tables songs
- Times tables online games/ apps:
 - Times Tables Rockstars
 - Hit The Button (quick fire practice)
 - www.timestables.co.uk

- Asking your child multiplication calculations out of order, like: “What is 4×7 ? What is 9×5 ? What is 6×11 ?”
- To help more visual, practical learners, start by using objects to show groups of numbers representing times tables, e.g. four groups of three pasta shells to show $3 \times 4 = 12$
- Asking your child related short division questions, like: “What is 12 divided by 4? What is 55 divided by 11?”
- Asking your child word problems based on times tables, like: “If five friends have £3 each, how much money do they have in total?”

The 36 Facts: Why they matter

- Reduced set: commutativity cuts down cognitive load – 144 facts to 36 key facts
- Learn 'harder' facts (6s, 7s, 8s, 9s, 12s) through patterns and strategies
- Build recall and reasoning: derive, not just chant

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

The 'Difficult Dozen'

6×6

6×7

6×8

7×7

7×8

7×9

8×8

8×9

8×12

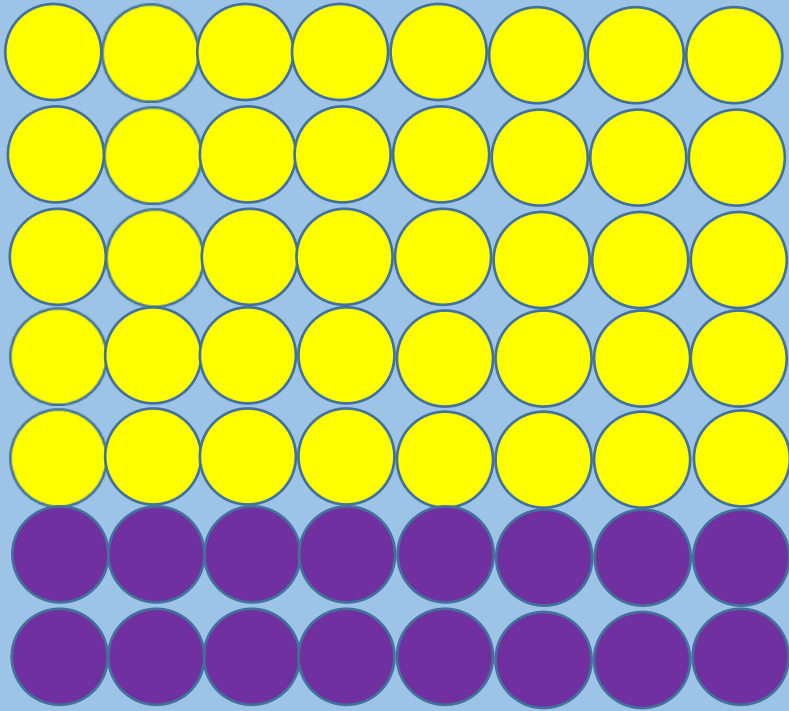
9×12

11×12

12×12

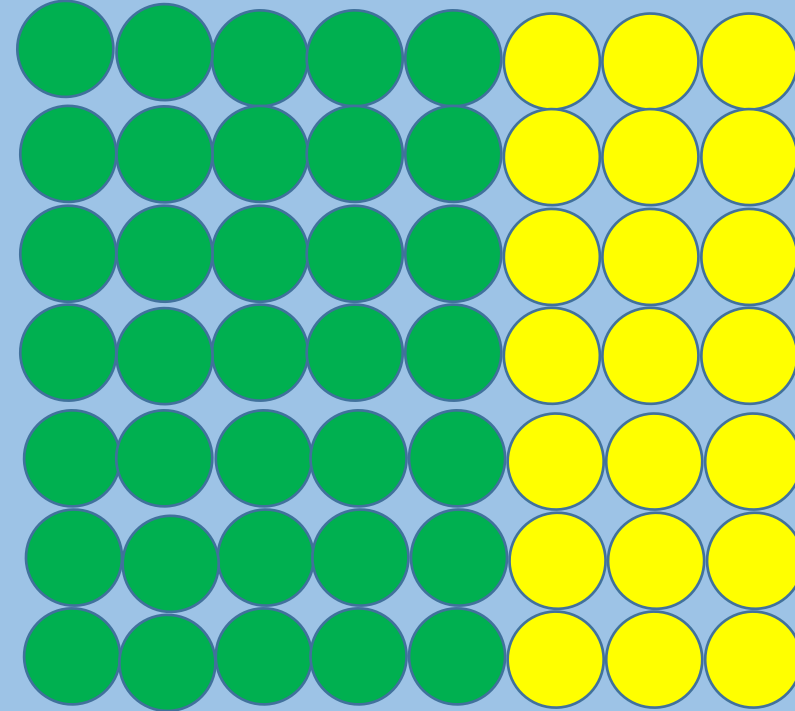
Distributive Thinking

- Encourages flexibility and deeper understanding of factors
- Highlights links between known and unknown facts



$$(5 \times 8) + (2 \times 8) = 40 + 16 = 56$$

7 x 8



$$(7 \times 5) + (7 \times 3) = 35 + 21 = 56$$

TIMES TABLES ROCK STARS

25

Next: 7×9

3×6

7	8	9
4	5	6
1	2	3
Delete	0	Submit

Help

Studio

9

Breakthrough Artist

Useful Tips

- Stick to one table at a time to minimise confusion.
- Start with chanting and writing them out slowly in order.
- Then move on to completing the answers quickly in order – on paper or verbally with your child.
- Finally, move on to completing the answers in any order.
- Keep reminding your child that 3×4 is the same as 4×3 – this effectively halves the number of tables facts.
- Each table has a square number 3×3 , 7×7 etc. These are special numbers that can act as a memory hook – emphasise them!
- Talk about the numbers as you are encountering them “ $5 \times 7 = 35$ that’s our house number” –this makes more memory hooks.