

Why is it important that children learn their times tables?

1. Times tables are fundamental to many maths topics
2. Freeing up working memory allows pupils to develop their reasoning skills
3. Multiplication and division feature very highly in the KS2 SATs reasoning papers

Our Aim


We want our children to be able to recall their multiplication and division facts with confidence. They will understand commutative and inverse facts and be able to use this knowledge to find mini and mega facts, e.g. $3 \times 4 = 12$ so $30 \times 4 = 120$ and $0.3 \times 4 = 1.2$

HOW

Focus on the essential facts and teach them the corresponding commutative and division facts. Teach conceptual understanding, daily fluency, display facts taught and use tailored support to reduce gaps before they become too big.

2tt	10tt	5tt	3tt	4tt	8tt	6tt	7tt	9tt	11tt	12tt
2 x 2										
3 x 2	3 x 10	3 x 5	3 x 3							
4 x 2	4 x 10	4 x 5	4 x 3	4 x 4						
5 x 2	5 x 10	5 x 5								
6 x 2	6 x 10	6 x 5	6 x 3	6 x 4	6 x 8	6 x 6				
7 x 2	7 x 10	7 x 5	7 x 3	7 x 4	7 x 8	7 x 6	7 x 7			
8 x 2	8 x 10	8 x 5	8 x 3	8 x 4	8 x 8					
9 x 2	9 x 10	9 x 5	9 x 3	9 x 4	9 x 8	9 x 6	9 x 7	9 x 9		
10 x 2	10 x 10									
11 x 2	11 x 10	11 x 5	11 x 3	11 x 4	11 x 8	11 x 6	11 x 7	11 x 9	11 x 11	
12 x 2	12 x 10	12 x 5	12 x 3	12 x 4	12 x 8	12 x 6	12 x 7	12 x 9	12 x 11	12 x 12

1. DISPLAY

Table being taught	Commutative facts	Inverse facts	Number families
$1 \times 2 = 2$ $2 \times 2 = 4$ $3 \times 2 = 6$ $4 \times 2 = 8$ etc.	$2 \times 1 = 2$ $2 \times 2 = 4$ $2 \times 3 = 6$ $2 \times 4 = 8$ etc.	$2 \div 1 = 2$ $4 \div 2 = 2$ $6 \div 2 = 3$ $8 \div 2 = 4$ etc.	$2 \div 2 = 1$ $4 \div 2 = 2$ $6 \div 3 = 2$ $8 \div 4 = 2$ etc.
			

2. CONCEPTUAL UNDERSTANDING (CPA approach)

Pattern Spotting and Repeated Addition

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

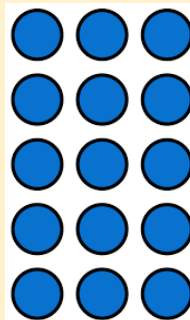
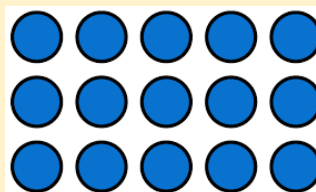
$$5 + 5 + 5$$



$$3 \times 5 = 5 + 5 + 5$$

Multiplication in commutative

$$3 \times 5 = 5 \times 3$$



Multiplication is the inverse of division

3 towers of 5 is equal to 15

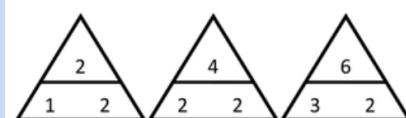
5 towers of 3 is equal to 15

15 divided into towers of 3 makes 5 towers

15 divided into towers of 5 makes 3 towers



Number families



$$3 \times 2 = 6$$


$$2 \times 3 = 6$$

$$6 \div 2 = 3$$

$$6 \div 3 = 2$$

Number Stick - Derive facts

<https://www.youtube.com/watch?v=yXdHGBfoqfw>

3. DAILY FLUENCY		
Number Stick https://www.youtube.com/watch?v=yXdHGBfoqfw		
Games/Songs	TTR Booklets	Flash Cards
 (Encourage both at home and at school)		

4. TARGETED SUPPORT - Identify those who are struggling and give them tailored support		
Cracking times tables (weekly in Yr 4 & 5)	TTR Data	Observations

WHEN	Autumn	Spring	Summer
EYFS	Recognising pairs, beginning to count in 10s + Number Stick		
KS1	Doubles, counting in 2s, 5s and 10s + Number Stick		
YEAR 3	2s, 10s and 5s	3s & 4s	4s & 8s
YEAR 4	RECAP 2s, 5s, 3s, 4s, 8s & 10s	6s, 7s, 9s, 12s & 11s	CONSOLIDATE/GAP FILL
YEAR 5	Daily Consolidation		
YEAR 6	Weekly Consolidation		