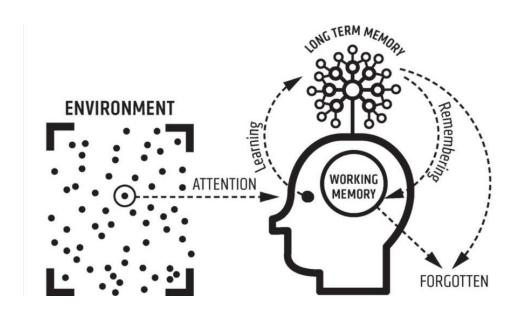
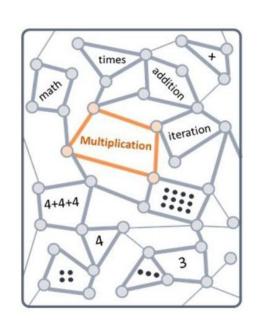
# Why teach number facts?

Flexible knowledge and swift recall of number facts are both crucial because they form a foundation for more complex math, improve mental arithmetic and problem-solving skills, and build confidence. When facts are retrieved automatically, they don't consume valuable working memory, allowing the mind to focus on new information and more complex problem-solving by reducing cognitive load.



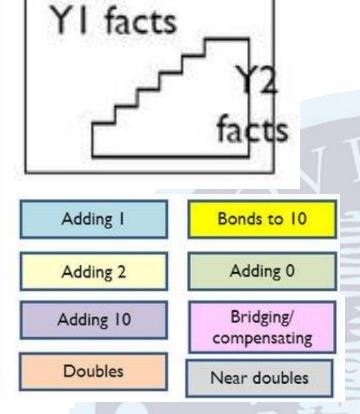


#### Number Facts: Teaching and Regular Practice

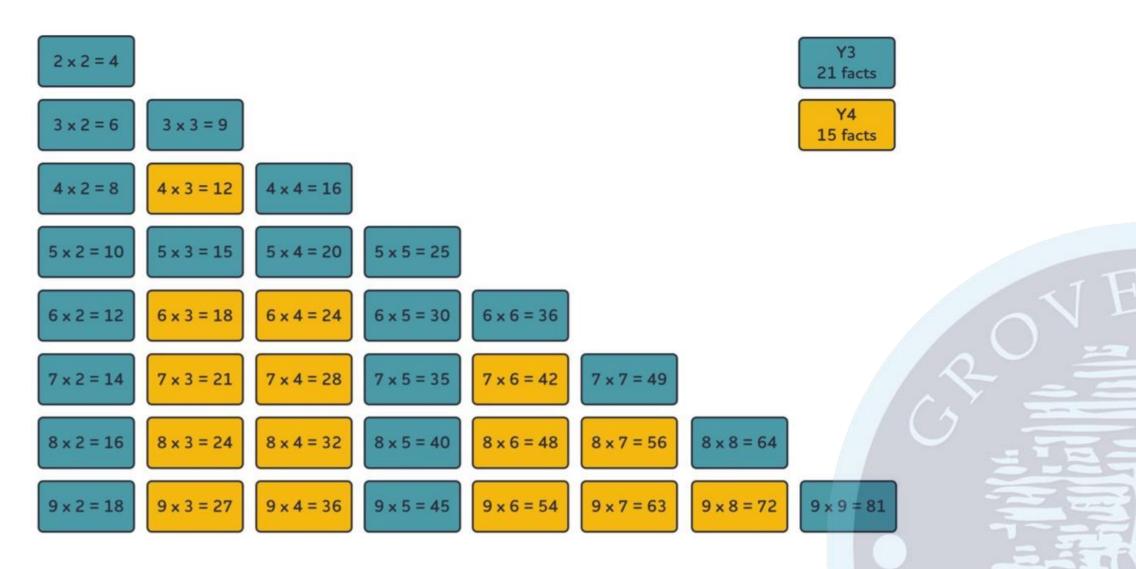
- Regular conceptual teaching of addition and subtraction facts with the aim of being secure in these within 20 by the end of Key Stage 1 and regular conceptual teaching of multiplication and division facts with the aim of being secure in these up to 12 x 12 by the end of Key Stage 2.
- Links to addition, subtraction, multiplication and division facts are embedded throughout the maths curriculum.
- Each half terms multiplication table focus is embedded into routines for regular practice.
- Each year group receives 4 x 15 minute Mastering number sessions which support the development of automaticity in number facts and using them to find related facts.
- Each year group has a maths session each week (separate from the learning journey) called 'Quick Maths' which is an additional chance to develop factual fluency and embed the weeks learning.
- Year 4 mastering number sessions follows a separate overview to learn the 36 most important facts and to use this to support deriving of other facts.
- Regular practice which includes use of TTRS as a homework expectations, with rewards and incentives attached.
- TTRS battles within school and local areas.

### Addition and Subtraction (End of KS1)

+	0	I	2	3	4	5	6	7	8	9	10
0	0 + 0	0 + 1	0 + 2	0 + 3	0 + 4	0 + 5	0 + 6	0 + 7	0 + 8	0 + 9	0 + 10
I	1+0	1+1	1 + 2	1 + 3	1 + 4	1 + 5	1 + 6	1 + 7	1 + 8	1 + 9	1 + 10
2	2 + 0	2 + 1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	2 + 9	2 + 10
3	3 + 0	3 + 1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7	3 + 8	3 + 9	3 + 10
4	4 + 0	4+1	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6	4 + 7	4 + 8	4+9	4 + 10
5	5 + 0	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5	5 + 6	5 + 7	5 + 8	5 + 9	5 + 10
6	6 + 0	6 + 1	6 + 2	6 + 3	6 + 4	6 + 5	6 + 6	6 + 7	6 + 8	6 + 9	6 + 10
7	7 + 0	7 + 1	7 + 2	7 + 3	7 + 4	7 + 5	7 + 6	7 + 7	7 + 8	7 + 9	7 + 10
8	8 + 0	8 + 1	8 + 2	8 + 3	8 + 4	8 + 5	8 + 6	8 + 7	8 + 8	8 + 9	8 + 10
9	9+0	9+1	9 + 2	9 + 3	9 + 4	9 + 5	9 + 6	9 + 7	9 + 8	9 + 9	9 + 10
10	10+0	10+1	10+2	10 + 3	10 + 4	10 + 5	10 + 6	10 + 7	10 + 8	10 + 9	10 + 10



### Multiplication and Division (End of Year 4)



#### Number Facts: Times tables overview

Year 1 – Age related addition and subtraction facts (see below) should be secure by the end of year 1 as a solid foundation to build multiplication facts in top of. By the end of year children should be ssecure counting in 2's, 5's and 10's.

Year 2 – See progression map for multiplication tables. All addition and subtraction facts (see below) within should be secure by the end of year 2 as a solid foundation to build multiplication facts in top of.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
		Securing counting in	Introduce 2 times table	2 times table facts	10 times table facts	5 times table facts	Introduce counting in 3's	
Year 2	2's, 5's and 10's	2 times tables facts	consolidation	consolidation	consolidation	Counting in 3's		
		consolidation	Introduce 10 times	Introduce 5 times table	Consolidation of 2, 5, 10	consolidation		
			table		times tables facts			
Year 3	Securing 2, 5, 10	Introducing 3 times	Introduce 4 times tables	3 and 4 times tables	8 times table	11 times tables		
	times tables and counting in 3's	table	3 and 4 times tables	consolidation	consolidation	Consolidate times tables		
	counting in 53	3 times table	consolidation	Introduce 8 times tables	2, 4 and 8 times tables	taught		
		consolidation			consolidation			
Year 4	Securing previously	6 times table	12 times table	7 x tables introduce/	Consolidation of all and	Consolidation and target		
	taught times tables	consolidation/ 9 times	consolidation (making	consolidation.	target of gaps	of gaps as a result of		
	- ) )	Introduce 6 times tables (making links	table introduce (making links with 3 and 6 times	links with 3, 6 and 9 times tables)	Continue to consolidate 36 most important facts.	MTC Check	national MTC	
	with 3 times tables)	tables)						
Year 5	Securing and	Securing and depending   Securing and deepening   Consolidation as a result of assessment and using knowing facts to find						
	depending the	the relationship 7 and 11 times tables		related facts. This is continued into Year 6.				
	relationship between   between 3, 6, 9 a							
	2, 4 and 8 times	tables.						
	tables.							

### Number Facts: Rewarding

- Weekly children will receive a TTRS sticker if they engage in TTRS on 3 days or more over the last 7 day period. This is done each Friday.
- Weekly top 3 classes and pupils (focus will differ each week) will be announced in assembly.. This will be shared on the Grove Valer.
- Half termly updating of the TTRS display board (Y2-6) to celebrate speed (class speed leader board) and engagement (Top coin earner, Mathematician of the Term)
- **Termly**, a child per class who has engaged the most or shown the most improvement with number facts will receive Mathematician of the Term. They will receive a certificate and a rock star medal in assembly. This will be shared on the Grove Valer.
- **Termly,** mathematicians of the term names will be put into a hat, with one the winning the Ultimate Mathematician of the Term, winning a rock star trophy and a £10 amazon voucher in assembly. This will be shared on the Grove Valer.





## Number Facts: Supporting Parents

- Guidance to all parents about number facts sent via parent pay.
- Guidance to Year 4 parents outlining multiplication tables check (MTC) in June 2026, sent via parent pay.
- Parent workshop to Year 4 parents outlining MTC.
- Website includes detailed guidance on the teaching and progression of number facts at Grove Vale as well as useful resources.
- Homework opportunities through TTRS and Maths.co.uk.
- **NEW** Additional home learning book to support Y4 chn and chn scoring below 20 on last year's government multiplication check (Current Y5).
- **NEW** Mastering number session delivered to Year 4 parents (as part of the MTC workshop) to showcase how we teach number facts and how it's is accompanied by representation, gesture and mathematical language.
- **NEW** Multiplication tables Heat maps given out at parents eve in Key Stage 2 so parents have a better understanding of which facts to target at home.