

St Mark's Times Tables System



Updated May 2023

At St Mark's, our aim is for children to become fluent in their multiplication and division facts. Being 'fluent' means that children are able to rapidly recall their times tables. If children can recall their tables at speed, it eases cognitive load for pupils and allows them to assess other areas of the Mathematics curriculum more readily.

The National Curriculum

The National Curriculum provides statutory guidance for schools which has guided us in developing our times tables system. The aim of the National Curriculum is for pupils to recall all their times tables by the end of year 4. This is broken down as follows:

Year 2 Expectation	Recall multiplication and division facts for the 2, 5 and 10 tables
Year 3 Expectation	Recall multiplication and division facts for the 3, 4 and 8 tables
Year 4 Expectation	Recall multiplication and division facts up to 12 x 12

Times Tables Teaching Sequence and Progression

From 2023, a new Times Tables teaching programme was implemented for years 1 – 6. This programme is designed for children to be moving at broadly the same pace, learning the same Times Tables together as a class. Our long-term plan, and order of teaching is detailed below:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Skip Count in 1s, 2s, 5s and 10s					
Year 2	Skip Count in 2s, 5s and 10s	2 x÷ 1 x÷ 0 x÷	10 x÷	5 x÷	Revision	Revision Skip Count in 3s
Year 3	Revision	3 x÷	4 x÷	8 x÷	11 x÷	Revision
Year 4	6 x÷	9 x÷	7 x÷	12 x÷	Revision	Year 4 Multiplication Tables Check
Year 5	Revision				Revision and squares	Revision and cubes
Year 6	Revision and derived facts					

Retrieval practice is integral within the way we learn at St Mark's. Once a times tables is taught, children will continue revising these facts in the months and years that follow, with the aim that learning is never forgotten, and that the recall of these facts become more efficient over time.

Facts taught by the end of Year 2:

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0x0	0x1	0x2	0x3	0x4	0x5	0x6	0x7	0x8	0x9	0x10	0x11	0x12
	0÷0	0÷1	0÷2	0÷3	0÷4	0÷5	0÷6	0÷7	0÷8	0÷9	0÷10	0÷11	0÷12
1	1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9	1x10	1x11	1x12
	0÷0	1÷1	2÷2	3÷3	4÷4	5÷5	6÷6	7÷7	8÷8	9÷9	10÷10	11÷11	12÷12
2	2x0	2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9	2x10	2x11	2x12
	0÷0	2÷1	4÷2	6÷3	8÷4	10÷5	12÷6	14÷7	16÷8	18÷9	20÷10	22÷11	24÷12
3	3x0	3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9	3x10	3x11	3x12
	0÷0	3÷1	6÷2	9÷3	12÷4	15÷5	18÷6	21÷7	24÷8	27÷9	30÷10	33÷11	36÷12
4	4x0	4x1	4x2	4x3	4x4	4x5	4x6	4x7	4x8	4x9	4x10	4x11	4x12
	0÷0	4÷1	8÷2	12÷3	16÷4	20÷5	24÷6	28÷7	32÷8	36÷9	40÷10	44÷11	48÷12
5	5x0	5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9	5x10	5x11	5x12
	0÷0	5÷1	10÷2	15÷3	20÷4	25÷5	30÷6	35÷7	40÷8	45÷9	50÷10	55÷11	60÷12
6	6x0	6x1	6x2	6x3	6x4	6x5	6x6	6x7	6x8	6x9	6x10	6x11	6x12
	0÷0	6÷1	12÷2	18÷3	24÷4	30÷5	36÷6	42÷7	48÷8	54÷9	60÷10	66÷11	72÷12
7	7x0	7x1	7x2	7x3	7x4	7x5	7x6	7x7	7x8	7x9	7x10	7x11	7x12
	0÷0	7÷1	14÷2	21÷3	28÷4	35÷5	42÷6	49÷7	56÷8	63÷9	70÷10	77÷11	84÷12
8	8x0	8x1	8x2	8x3	8x4	8x5	8x6	8x7	8x8	8x9	8x10	8x11	8x12
	0÷0	8÷1	16÷2	24÷3	32÷4	40÷5	48÷6	56÷7	64÷8	72÷9	80÷10	88÷11	96÷12
9	9x0	9x1	9x2	9x3	9x4	9x5	9x6	9x7	9x8	9x9	9x10	9x11	9x12
	0÷0	9÷1	18÷2	27÷3	36÷4	45÷5	54÷6	63÷7	72÷8	81÷9	90÷10	99÷11	108÷12
10	10x0	10x1	10x2	10x3	10x4	10x5	10x6	10x7	10x8	10x9	10x10	10x11	10x12
	0÷0	10÷1	20÷2	30÷3	40÷4	50÷5	60÷6	70÷7	80÷8	90÷9	100÷10	110÷11	120÷12
11	11x0	11x1	11x2	11x3	11x4	11x5	11x6	11x7	11x8	11x9	11x10	11x11	11x12
	0÷0	11÷1	22÷2	33÷3	44÷4	55÷5	66÷6	77÷7	88÷8	99÷9	110÷10	121÷11	132÷12
12	12x0	12x1	12x2	12x3	12x4	12x5	12x6	12x7	12x8	12x9	12x10	12x11	12x12
	0÷0	12÷1	24÷2	36÷3	48÷4	60÷5	72÷6	84÷7	96÷8	108÷9	120÷10	132÷11	144÷12

Year 2 Facts

Facts taught by the end of Year 3:

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0x0	0x1	0x2	0x3	0x4	0x5	0x6	0x7	0x8	0x9	0x10	0x11	0x12
	0÷0	0÷1	0÷2	0÷3	0÷4	0÷5	0÷6	0÷7	0÷8	0÷9	0÷10	0÷11	0÷12
1	1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9	1x10	1x11	1x12
	0÷0	1÷1	2÷2	3÷3	4÷4	5÷5	6÷6	7÷7	8÷8	9÷9	10÷10	11÷11	12÷12
2	2x0	2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9	2x10	2x11	2x12
	0÷0	2÷1	4÷2	6÷3	8÷4	10÷5	12÷6	14÷7	16÷8	18÷9	20÷10	22÷11	24÷12
3	3x0	3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9	3x10	3x11	3x12
	0÷0	3÷1	6÷2	9÷3	12÷4	15÷5	18÷6	21÷7	24÷8	27÷9	30÷10	33÷11	36÷12
4	4x0	4x1	4x2	4x3	4x4	4x5	4x6	4x7	4x8	4x9	4x10	4x11	4x12
	0÷0	4÷1	8÷2	12÷3	16÷4	20÷5	24÷6	28÷7	32÷8	36÷9	40÷10	44÷11	48÷12
5	5x0	5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9	5x10	5x11	5x12
	0÷0	5÷1	10÷2	15÷3	20÷4	25÷5	30÷6	35÷7	40÷8	45÷9	50÷10	55÷11	60÷12
6	6x0	6x1	6x2	6x3	6x4	6x5	6x6	6x7	6x8	6x9	6x10	6x11	6x12
	0÷0	6÷1	12÷2	18÷3	24÷4	30÷5	36÷6	42÷7	48÷8	54÷9	60÷10	66÷11	72÷12
7	7x0	7x1	7x2	7x3	7x4	7x5	7x6	7x7	7x8	7x9	7x10	7x11	7x12
	0÷0	7÷1	14÷2	21÷3	28÷4	35÷5	42÷6	49÷7	56÷8	63÷9	70÷10	77÷11	84÷12
8	8x0	8x1	8x2	8x3	8x4	8x5	8x6	8x7	8x8	8x9	8x10	8x11	8x12
	0÷0	8÷1	16÷2	24÷3	32÷4	40÷5	48÷6	56÷7	64÷8	72÷9	80÷10	88÷11	96÷12
9	9x0	9x1	9x2	9x3	9x4	9x5	9x6	9x7	9x8	9x9	9x10	9x11	9x12
	0÷0	9÷1	18÷2	27÷3	36÷4	45÷5	54÷6	63÷7	72÷8	81÷9	90÷10	99÷11	108÷12
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	0÷0	10÷1	20÷2	30÷3	40÷4	50÷5	60÷6	70÷7	80÷8	90÷9	100÷10	110÷11	120÷12
11	11x0	11x1	11x2	11x3	11x4	11x5	11x6	11x7	11x8	11x9	11x10	11x11	11x12
	0÷0	11÷1	22÷2	33÷3	44÷4	55÷5	66÷6	77÷7	88÷8	99÷9	110÷10	121÷11	132÷12
12	12x0	12x1	12x2	12x3	12x4	12x5	12x6	12x7	12x8	12x9	12x10	12x11	12x12
	0÷0	12÷1	24÷2	36÷3	48÷4	60÷5	72÷6	84÷7	96÷8	108÷9	120÷10	132÷11	144÷12

Year 2 Facts

Year 3 Facts

Facts taught by the end of Year 4:

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0×0 $0 \div 0$	0×1 $0 \div 1$	0×2 $0 \div 2$	0×3 $0 \div 3$	0×4 $0 \div 4$	0×5 $0 \div 5$	0×6 $0 \div 6$	0×7 $0 \div 7$	0×8 $0 \div 8$	0×9 $0 \div 9$	0×10 $0 \div 10$	0×11 $0 \div 11$	0×12 $0 \div 12$
1	1×0 $0 \div 1$	1×1 $1 \div 1$	1×2 $2 \div 2$	1×3 $3 \div 3$	1×4 $4 \div 4$	1×5 $5 \div 5$	1×6 $6 \div 6$	1×7 $7 \div 7$	1×8 $8 \div 8$	1×9 $9 \div 9$	1×10 $10 \div 10$	1×11 $11 \div 11$	1×12 $12 \div 12$
2	2×0 $0 \div 2$	2×1 $2 \div 1$	2×2 $4 \div 2$	2×3 $6 \div 3$	2×4 $8 \div 4$	2×5 $10 \div 5$	2×6 $12 \div 6$	2×7 $14 \div 7$	2×8 $16 \div 8$	2×9 $18 \div 9$	2×10 $20 \div 10$	2×11 $22 \div 11$	2×12 $24 \div 12$
3	3×0 $0 \div 3$	3×1 $3 \div 1$	3×2 $6 \div 2$	3×3 $9 \div 3$	3×4 $12 \div 4$	3×5 $15 \div 5$	3×6 $18 \div 6$	3×7 $21 \div 7$	3×8 $24 \div 8$	3×9 $27 \div 9$	3×10 $30 \div 10$	3×11 $33 \div 11$	3×12 $36 \div 12$
4	4×0 $0 \div 4$	4×1 $4 \div 1$	4×2 $8 \div 2$	4×3 $12 \div 3$	4×4 $16 \div 4$	4×5 $20 \div 5$	4×6 $24 \div 6$	4×7 $28 \div 7$	4×8 $32 \div 8$	4×9 $36 \div 9$	4×10 $40 \div 10$	4×11 $44 \div 11$	4×12 $48 \div 12$
5	5×0 $0 \div 5$	5×1 $5 \div 1$	5×2 $10 \div 2$	5×3 $15 \div 3$	5×4 $20 \div 4$	5×5 $25 \div 5$	5×6 $30 \div 6$	5×7 $35 \div 7$	5×8 $40 \div 8$	5×9 $45 \div 9$	5×10 $50 \div 10$	5×11 $55 \div 11$	5×12 $60 \div 12$
6	6×0 $0 \div 6$	6×1 $6 \div 1$	6×2 $12 \div 2$	6×3 $18 \div 3$	6×4 $24 \div 4$	6×5 $30 \div 5$	6×6 $36 \div 6$	6×7 $42 \div 7$	6×8 $48 \div 8$	6×9 $54 \div 9$	6×10 $60 \div 10$	6×11 $66 \div 11$	6×12 $72 \div 12$
7	7×0 $0 \div 7$	7×1 $7 \div 1$	7×2 $14 \div 2$	7×3 $21 \div 3$	7×4 $28 \div 4$	7×5 $35 \div 5$	7×6 $42 \div 6$	7×7 $49 \div 7$	7×8 $56 \div 8$	7×9 $63 \div 9$	7×10 $70 \div 10$	7×11 $77 \div 11$	7×12 $84 \div 12$
8	8×0 $0 \div 8$	8×1 $8 \div 1$	8×2 $16 \div 2$	8×3 $24 \div 3$	8×4 $32 \div 4$	8×5 $40 \div 5$	8×6 $48 \div 6$	8×7 $56 \div 7$	8×8 $64 \div 8$	8×9 $72 \div 9$	8×10 $80 \div 10$	8×11 $88 \div 11$	8×12 $96 \div 12$
9	9×0 $0 \div 9$	9×1 $9 \div 1$	9×2 $18 \div 2$	9×3 $27 \div 3$	9×4 $36 \div 4$	9×5 $45 \div 5$	9×6 $54 \div 6$	9×7 $63 \div 7$	9×8 $72 \div 8$	9×9 $81 \div 9$	9×10 $90 \div 10$	9×11 $99 \div 11$	9×12 $108 \div 12$
10	10×0 $0 \div 10$	10×1 $10 \div 1$	10×2 $20 \div 2$	10×3 $30 \div 3$	10×4 $40 \div 4$	10×5 $50 \div 5$	10×6 $60 \div 6$	10×7 $70 \div 7$	10×8 $80 \div 8$	10×9 $90 \div 9$	10×10 $100 \div 10$	10×11 $110 \div 11$	10×12 $120 \div 12$
11	11×0 $0 \div 11$	11×1 $11 \div 1$	11×2 $22 \div 2$	11×3 $33 \div 3$	11×4 $44 \div 4$	11×5 $55 \div 5$	11×6 $66 \div 6$	11×7 $77 \div 7$	11×8 $88 \div 8$	11×9 $99 \div 9$	11×10 $110 \div 10$	11×11 $121 \div 11$	11×12 $132 \div 12$
12	12×0 $0 \div 12$	12×1 $12 \div 1$	12×2 $24 \div 2$	12×3 $36 \div 3$	12×4 $48 \div 4$	12×5 $60 \div 5$	12×6 $72 \div 6$	12×7 $84 \div 7$	12×8 $96 \div 8$	12×9 $108 \div 9$	12×10 $120 \div 10$	12×11 $132 \div 11$	12×12 $144 \div 12$

Year 2 Facts	
Year 3 Facts	
Year 4 Facts	

Teaching Times Tables

Children will learn the premise of multiplication and division within their core Maths lessons. This understanding will be built on within their Times Tables lessons.

At St Mark's, we follow a 'Teaching for Mastery' approach across all our Mathematics. This approach has the premise that all children can achieve and feel successful in their Maths, and ultimately 'master' their curriculum. We follow set principles which underpin this approach such as using visuals, making learning coherent, engaging mathematical thinking and variation.

A whole half term is allocated to learning each new set of Times Tables facts. This longer period of time helps children to gain a deeper understanding, and develop a more secure recall of their multiplication and division facts.

Discrete Times Tables lessons are taught multiple times a week across the school. These lessons follow a sequence of teaching points with the aim that children develop strong conceptual understanding of the facts they are learning as well as rich teaching experiences enabling children to be able to make connections and links within their Mathematics.

As a school, we believe that the emphasis should be on high-quality teaching and learning of Times Tables as opposed to testing however, we do need opportunities to assess the children's learning from time to time. Once a term, children will undertake a 'Times Tables Quiz' which will be comprised of 25 multiplication and division questions which they have previously learned. Results will help teachers to identify areas of strength, but also where support is needed.

An exemplar teaching sequence of the Five Times Tables is detailed below:

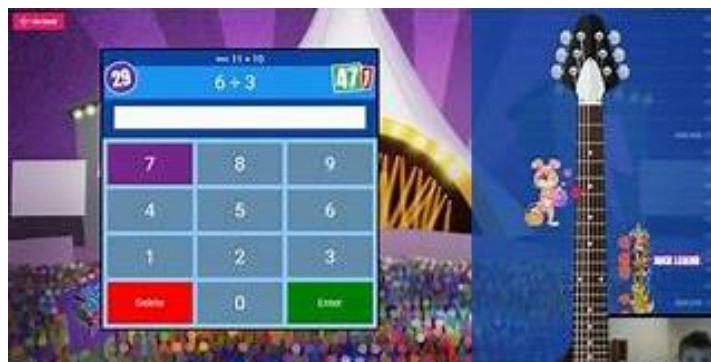
Teaching point 1	Show the expressions for the new times table – which expressions have we already learned through other times tables (commutative law) and which are new? How many facts do we already know? How many new facts have we got to learn?
Teaching point 2	Introduce the new times table by asking – what comes in 5s? Gather ideas from the real world e.g. weekdays, digits on a hand, five pence. Consider links with different aspects of maths/measure e.g. time, capacity, mass. Create a class display of their ideas.
Teaching point 3	Focus on the conceptual understanding using both arrays and unitising. Children to orally say expressions for each e.g. zero sevens are zero, one seven is seven etc, Focus on the expression rather than the equation ('answer') Vary the language used so children can make connections and develop a full sense of understanding. E.g. one five, one times five, one group of five etc
Teaching point 4	Ask questions so children make links such as 'what do you notice about 2 groups of 5 and 4 groups of 5?' (relate to doubles). 'What is the connection with 10 groups of 5 and 9 groups of 5?' (adjustment that is it one five less) These connections will aid them in recalling unknown multiples using known facts.
Teaching point 5	Use a counting stick and visual representation of the tens frame to support the recall of the multiples in this times table. Continue to ask questions to help children make the link between different times tables e.g. look at the tens frame, what do you notice about 4×5 and 8×5 ? (8×5 is double 4×5) What do you notice about 5×5 and 10×5 ? (5×5 is half of 10×5) Use these connections to recall all the multiples, in a logical order.
Teaching point 6	Oral rehearsal. Skip count multiples using different language e.g. "Zero, five, ten, fifteen.... " "Zero times five is zero, one times five is five, two times five is ten... " "Zero fives are zero, one five is five, two fives are ten... " "Zero groups of five is equal to zero, one group of five is equal to five... "
Teaching point 7	Explore generalisations and spot patterns in the multiples. Guide children by asking lines of enquiry e.g. what do you notice about the sum of the digits? Use stem sentences to support making generalisations e.g. 'Multiples of 5 are always/sometimes/never even' or 'The ones digit is always a _ or _ in multiples of 5.'
Teaching point 8	Investigate sorting numbers into multiples of 5, and non-multiples of 5. Children can draw on their knowledge of generalisations to support their thinking.
Teaching point 9	Make links between specific times tables such as the link between the 10 and 5 making it explicit how one fact supports another. Show this link using tables, visuals, equations side by side etc.
Teaching point 10	Explore the difference between consecutive multiples of 5, and learn how this can be used as a strategy e.g. if we know $8 \times 5 = 40$, we can add or subtract the difference of 5 to find both 7×5 and also 9×5 .
Teaching point 11	Counting stick and number track recall with missing numbers. Children will now have explored and acquired some strategies to recall the multiples both in and out of order.
Teaching point 12	Explore the distributive law through arrays alongside a part-part whole model e.g. knowing that $12 \times 3 = 10 \times 3 + 2 \times 3$ or that $9 \times 3 = 10 \times 3 - 1 \times 3$. This gives children yet another strategy to derive their times tables, as well as reinforcing conceptual understanding. Children may use standard partitioning e.g. partitioning 12 into 10 and 2, or non-standard partitioning e.g. 12 into 6 and 6.
Teaching point 13	Practise recall of multiplication facts out of order. The children will have all the taught strategies now. Give them opportunities/activities where they will need to recall them out of order. This could be whole class, paired, individual. This could be online such as hit the button, on the IWB, worksheet based.
Teaching point 14	Apply the known multiplication facts to real life problems. Vary the complexity of the questions from simple one-step problems, to sophisticated multi-step. Encourage children to write equations to match the problem for example 'How many wheels on 5 tricycles?' The equation is $5 \times 3 = 15$ (or $3 \times 5 = 15$)
Teaching point 15	Relate existing knowing to the inverse (division) through patterning and fact families. In this step, be aware of the misconception that children may think division is commutative, however $3 \div 12 = 4$ is incorrect, for example.
Teaching point 16	Recall division facts out of order supported by reasoning of the related multiplication fact e.g. I know $15 \div 5 = 3$ because $3 \times 5 = 15$. When we ask – how do you know?
Teaching point 17	Apply the known division facts to real life problems. Encourage children to write equations to match the problem for example 'Hassan has collected some 5p in a jar. He has 45p altogether. How many 5p does he have?' The equation is $45 \div 5 = 9$
Teaching point 18	Practise recall of multiplication and division facts out of order. The children will have all the taught strategies now. Give them opportunities/activities where they will need to recall them out of order as a whole class, paired, and individual as well as orally and written recall.

DfE Year 4 Multiplication Check

In 2022, the Department for Education introduced a statutory Multiplication Check for Year 4 pupils which takes place in June of the Summer Term. The purpose of the check is to determine whether children can fluently recall their Times Tables up to 12×12 , which is essential for future success in Mathematics. This test will also help our school to identify pupils who may need additional support within Year 5 and 6. The Multiplication Check will be in school time, and will consist of 25 mixed multiplication questions. Pupils will have 6 seconds to answer each question. If you have a pupil in Year 4, you will receive a copy of the children's results in their end of year report.

Times Tables RockStars

TT RockStars is an educational learning platform which is specifically designed to support children in learning and becoming more fluent in their Times Tables. There are many different games and modes within this platform for children to practice in different ways.



There are also competitive elements where children can play against fellow pupils, the computer or other players from all around the World (within a safe avatar name). This is a useful tool for teachers as we are able to review children's effort and performance, whilst also analysing data to identify any Times Tables which children are finding difficult.

Supporting Times Tables at Home

Whilst we do have a heavy emphasis on learning times tables at school, this is best supported when children also have opportunities to practise and embed their learning at home too. Times Tables practice is part of our weekly homework expectations, and we would encourage pupils to dedicate some time to practising their recall each week. This practice can be verbal, using home resources, or of course using platforms like TTRockStars or Hit the Button. Please ask your class teacher if you would like any help in knowing how to best support your child at home.