

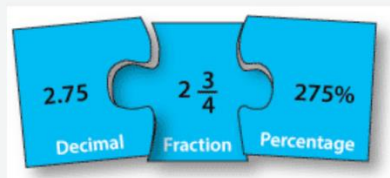
Times Tables
Parents Workshop
PPT

Curriculum Expectations

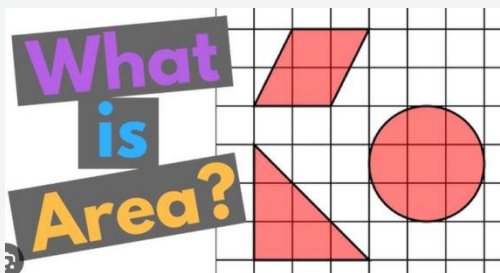
Year 1	Count in multiples of 2, 5 and 10. Recall and use all doubles to 10 and corresponding halves.
Year 2	Recall and use multiplication and division facts for the 2, 5 and 10 times tables including recognizing odd and even numbers.
Year 3	Recall and use multiplication and division facts for the 3, 4 and 8 times tables.
Year 4	Recall and use multiplication and division facts for tables up to 12 x 12
Year 5	Revision of all times tables and division facts up to 12 x 12
Year 6	Revision of all times tables and division facts up to 12 x 12

Why are times tables so important?

a	b
1	4
2	8
3	12
6	24
9	36



- Times Tables knowledge underpins much of the primary mathematics curriculum.
- Mastering times tables and having the ability to quickly recall known facts is a necessary step to approaching more challenging topics as children progress through school.



Key Stage 2 topics which require times tables.

Cube
Numbers

Factors

Multiplication

Fractions

Ratio

Division

Decimals

Prime
Numbers

Common
Multiples

Square
Numbers

Area

Place
Value

How do we teach times tables at Bishop Martin?

- Explicit teaching through the White Rose (Our curriculum)
 - Regular reviews
- Multiplication lessons weekly
 - Regular practice
- Times Tables Rockstars



The Number Sense Approach

Pupils who find times tables difficult, tend to choose inefficient methods to retrieve facts. This increases cognitive load and slows the pace of learning.

e.g. 8×6 (Unable to recall the fact)

Begins to skip count from zero using fingers (0, 8, 16...)

This increases the scope for error.



The Number Sense Approach

- By teaching patterns and exploring the relationships between different times tables and by learning all the associated division facts, we aim to equip pupils with the most efficient methods.
- The order in which we teach times tables allows pupils to see the links between each times tables.

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

Bridging Steps

- By using known facts as bridging steps, we can make connections in learning.
- Square numbers and the 10 times table are excellent bridging step.
- These strategies help speed up pupils recall and avoids over-loading the working memory.

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

There are not 144 facts to learn.

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Children start with their multiples
of 1, 2, 5 and 10.

Next are the multiplies of 3 and
6 then 4 and 8.

2	49	56	63	70
8	56	64	72	80
4	63	72	81	90

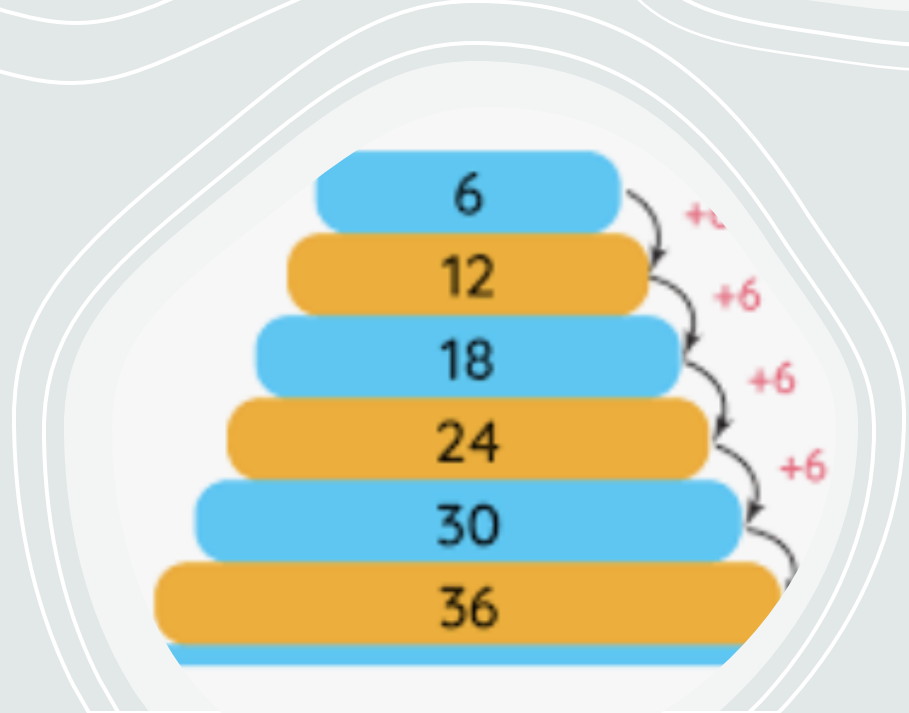
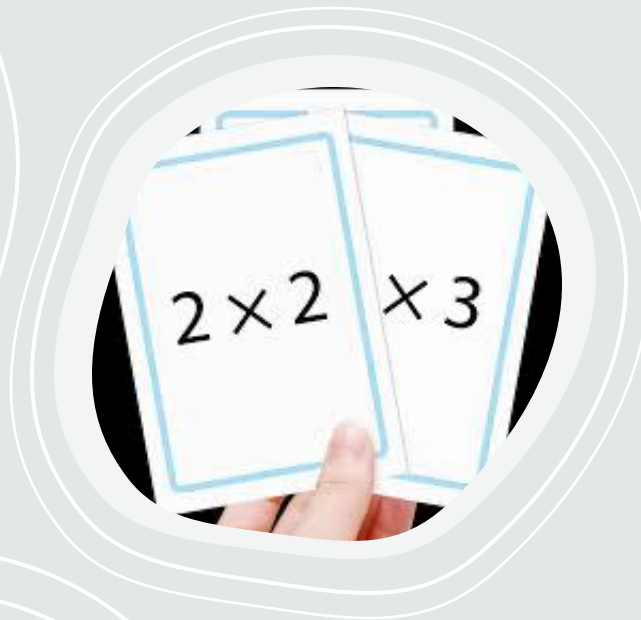
This leaves a small number of facts that require explicit focus.

How can you help at home?

- Regular practice using different resources – little and often. **TTRS, MyMaths, Maths Frame, Hit the Button, BBC Maths Games.**
- Make it part of your family's day or have a family competition.
- Engage with TTRS Battles in school.



$8 \div 8$	$16 \div 8$
$32 \div 8$	$40 \div 8$
$56 \div 8$	$64 \div 8$
$80 \div 8$	$88 \div 8$



How can you help at home?

- Practice skip counting forwards and backwards.
- Start at different points when recalling times tables.
- Mix in some division facts.
- Flash cards.
- Display facts around the house.
- Look for ways to remember the tricky ones. $56 = 7 \times 8$
5678 Consecutive numbers

Where to practice when on Times Tables Rockstar

- *Gig: Assessment*
- *Garage: Practice Personalised tables based on knowledge*
- *Jamming: Timer free game with choice of tables*
- *Studio: 1 minute game across all tables – improves recall and gives rock status*
- *Festival: Take on pupils from around the world (12x12)*
- *Rock slam: 1 minute game allowing pupils to challenge other children in school*
- *Soundcheck: Similar to multiplication check*
- *Arena: Live classroom game adapted to each child's level*
- *Battle: Set up between groups of children as a competition*

