Progression in Multiplication Tables Policy

Horwich Parish CE Primary School

Approved by: School Improvement Committee		**Date: Jun-24**
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Our vision is to be a school where everyone can achieve and "let their light shine" both individually and collectively as a community.
Learning to love each other as Jesus loved us, respecting each other and growing into the people God has called us to be.

Contents

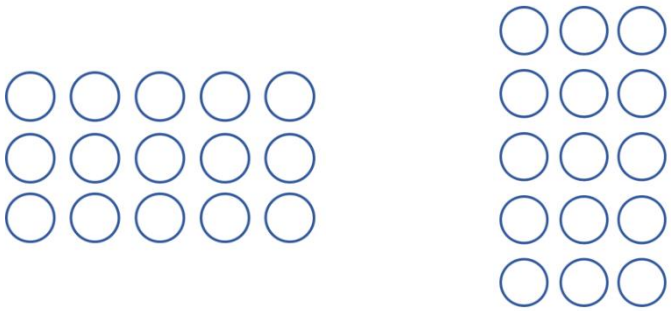
1. Intent

At Horwich Parish CE School we believe that multiplication tables knowledge underpins almost every concept in the maths curriculum. We want our children to be fluent in their knowledge multiplication tables up to 12 x 12, know that they are commutative (a x b = b x a) and be able to apply the facts to other mathematical concepts.

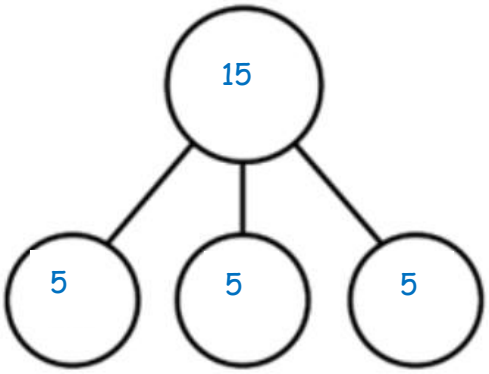
2. Implementation

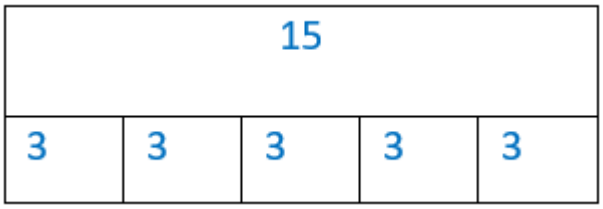
Pupils should be exposed to concrete, pictorial and abstract representations of multiplication tables.

- Multiplication facts will be taught through concrete manipulatives e.g., counters to make arrays.



- Pictorial methods can then be explored such as non-concrete visual arrays and part-whole models. This will aid understanding that multiplication facts are commutative.





- Finally, more abstract terms can be discussed e.g., 2 x 4 = 12. This fact can be extrapolated to include place value knowledge e.g., 20 x 4 = 120. These facts should be represented in different ways e.g.

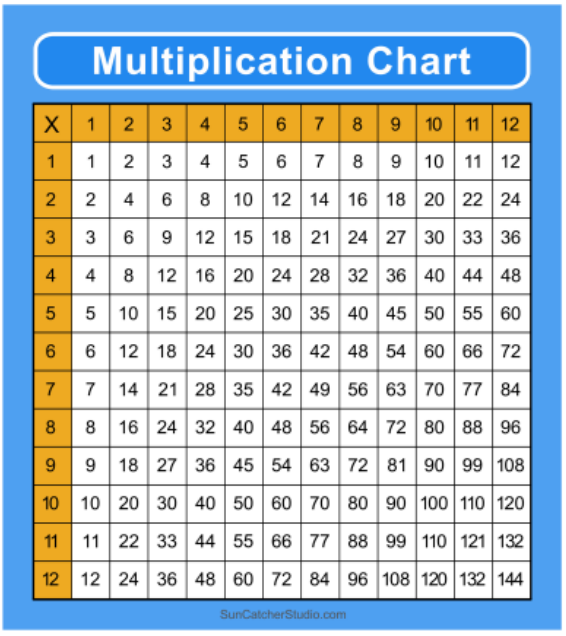
  4 x 2 = 12

  12 ÷ 4 = 3
- Children will receive a multiplication card containing all the multiplication tables up to 12 x 12 in Y2 and are rewarded when they achieve bronze, silver and gold awards.
- All children will receive a login to Times Tables Rockstars, a carefully sequenced programme of daily times tables practice.

3. Impact

Children at Horwich Parish CE School can recall multiplication facts fluently and this will be shown in the Y4 multiplication test. Children will understand that multiplication table facts are commutative (a x b = b x a) and are able to apply the facts to other mathematical concepts.

Year 1 Make connections between arrays, number patterns, and counting in 2s, 5s and 10s	Year 2 Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Recall and use multiplication and division facts for multiplication tables x 4 and x 8
Year 3 Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables. Recall and use multiplication and division facts for multiplication tables x 3, x 4, x 6 and x 8	Year 4 Recall multiplication and division facts for multiplication tables up to 12 × 12
Year 5 Square numbers and square roots Cubed numbers and cubed roots Identify factors and multiples	Year 6 Identify common factors, common multiples and prime numbers Explore order of operations



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