

# St.Peter's C.E. Primary School



## Multiplication Tables Policy

2020-2021

Updated: February 2020

To be reviewed: February 2021

## Multiplication Tables Policy

Times Tables are at the heart of mental arithmetic which in itself helps form the basis of a child's understanding and ability when working with number. Once the children have learnt the times tables and related divisions by heart, they are able to work far more confidently – and efficiently – through a wide range of more advanced calculations. At St. Peter's, we believe that through a variety of interactive, visual, engaging and rote learning techniques, most children can achieve the full times tables knowledge required by the end of Year 4.

### Aims

1. To raise the profile of the teaching of times tables and to raise overall knowledge of the times tables and related division facts across the school.
2. To explain the expected practices, to ensure children learn their times tables.
3. To ensure continuity in practices and progression in times tables.
4. To ensure there is successful teaching and learning of times tables and related divisions within our school.
5. To develop our knowledge of language associated with times tables: **'times', 'lots of', 'multiplied by', and 'group of', 'multiplier', 'multiplicand', 'product'**.

<b>Step 1</b>	Order of introduction.	<b>See below</b>															
<b>Step 2</b>	Use of the concrete, pictorial, abstract approach	Before learning tables, children need to understand times tables in context – a variety of concrete and pictorial resources will be required to see grouping objects as repeated addition. Resources such as numicon, diennes, multi-link cubes, real objects to group and count, arrays of pictures and number link boards will be used.															
<b>Step 3</b>	Introducing new times tables	Use songs and rhymes to support the learning of times tables <ul style="list-style-type: none"> <li>• Percy Parker</li> <li>• Number Fun</li> </ul>															
	Introduce a new times table by building it around known facts	We have learned the 2,3,4,5 and 10 times tables. We already know some of the facts from the 8 times table. What are they? <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Known facts</th> <th style="text-align: center;">Facts to learn</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>0 \times 8 = 8</math></td> <td style="text-align: center;"><math>6 \times 8 = 48</math></td> </tr> <tr> <td style="text-align: center;"><math>1 \times 8 = 8</math></td> <td style="text-align: center;"><math>7 \times 8 = 56</math></td> </tr> <tr> <td style="text-align: center;"><math>2 \times 8 = 16</math></td> <td style="text-align: center;"><math>8 \times 8 = 64</math></td> </tr> <tr> <td style="text-align: center;"><math>3 \times 8 = 24</math></td> <td style="text-align: center;"><math>9 \times 8 = 72</math></td> </tr> <tr> <td style="text-align: center;"><math>4 \times 8 = 32</math></td> <td style="text-align: center;"><math>11 \times 8 = 88</math></td> </tr> <tr> <td style="text-align: center;"><math>5 \times 8 = 40</math></td> <td style="text-align: center;"><math>12 \times 8 = 96</math></td> </tr> <tr> <td style="text-align: center;"><math>10 \times 8 = 80</math></td> <td></td> </tr> </tbody> </table>	Known facts	Facts to learn	$0 \times 8 = 8$	$6 \times 8 = 48$	$1 \times 8 = 8$	$7 \times 8 = 56$	$2 \times 8 = 16$	$8 \times 8 = 64$	$3 \times 8 = 24$	$9 \times 8 = 72$	$4 \times 8 = 32$	$11 \times 8 = 88$	$5 \times 8 = 40$	$12 \times 8 = 96$	$10 \times 8 = 80$
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	Commutative law	Awareness and understanding of commutative law $6 \times 4 = 24$ $4 \times 6 = 24$															
	Language	Always use language associated with times tables: <b>'times', 'lots of', 'multiplied by', and 'group of', 'multiplier', 'multiplicand', 'product'</b> .															

<b>Step 4</b>	Opportunities to practise times tables-multiplication and division facts.	Tables to be practised at the start of every maths lesson
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	Opportunities to practise times tables-multiplication and division facts.	<ul style="list-style-type: none"> <li>• In order</li> <li>• Out of order</li> <li>• Product first</li> <li>• In order</li> <li>• Out of order</li> <li>• Quotient first</li> </ul>
<b>Step 5</b>	Explore patterns in times tables.	Ensure children engage with 'rich' tasks/investigations linked to times tables which encourage deeper learning, greater levels of reasoning, links to be made and patterns to be discovered.
<b>Step 6</b>	Application	Provide opportunities for pupils to apply their knowledge

### Order of introduction

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Count in 2s, 5s, 10s	Count in 3s	Count in 3s, 4, 8s, 50s and 100s	Count in 6s, 7s, 9s, 12s 25s	Continue to revise multiplication tables up to 12 X 12	Continue to revise multiplication tables up to 12 X 12
	Multiplication and division facts for 2, 5 and 10	Multiplication and division facts for 3, 4 and 8	Multiplication and division facts for 6,7,9, 11 and 12	Recognise and use square numbers and cube numbers and the notation for square and cubed.	Continue to recognise and use square numbers and cube numbers and the notation for square and cubed.

**We recommend using the following apps and websites:**

- TT Rockstars (all children in Year 2-6 have a log in) <https://trockstars.com/>
- Hit the Button <https://www.topmarks.co.uk/maths-games/hit-the-button>
- IXL maths (all children in Year 1-6 have a log in) <https://uk.ixl.com>

***1John 3:18 Dear children, let us not love with words or speech but with actions and in truth***