

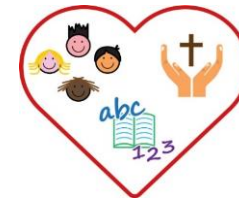
<https://www.topmarks.co.uk/mathsgames/hit-the-button>



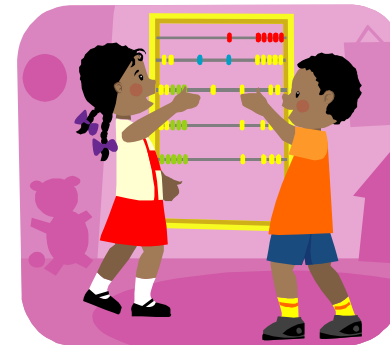
[www.mathszone.co.uk](http://www.mathszone.co.uk)



St Matthew's C.E. School and Nursery



# Help your child to learn maths facts Year 3



Parent's and carer's guide to support  
children with 'Learning by Heart'  
programme  
Spring 2022

## 'Learning by Heart'

Developing children's knowledge of mathematical facts so that they know them 'by heart' is a valuable tool to support calculation strategies, and also helps to build confidence. Regular practice is needed to secure knowledge and help children instantly recall facts.

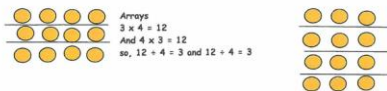
We encourage children to think 'Can I do this in my head?' Having a range of number facts at their fingertips really empowers the children and enables them to approach tasks with confidence.

Young children need to work practically using apparatus like toys, small objects, coins, etc, this will help children to check their mental work with real materials.

### Spring Term 1: Know multiplication and division facts for the 3x table (Reinforce knowledge of x5)

$0 \times 3 = 0$	$3 \times 0 = 0$		
$1 \times 3 = 3$	$3 \times 1 = 3$	$3 \div 3 = 1$	$3 \div 1 = 3$
$2 \times 3 = 6$	$3 \times 2 = 6$	$6 \div 3 = 2$	$6 \div 2 = 3$
$3 \times 3 = 9$	$3 \times 3 = 9$	$9 \div 3 = 3$	$9 \div 3 = 3$
$4 \times 3 = 12$	$3 \times 4 = 12$	$12 \div 3 = 4$	$12 \div 4 = 3$
$5 \times 3 = 15$	$3 \times 5 = 15$	$15 \div 3 = 5$	$15 \div 5 = 3$
$6 \times 3 = 18$	$3 \times 6 = 18$	$18 \div 3 = 6$	$18 \div 6 = 3$
$7 \times 3 = 21$	$3 \times 7 = 21$	$21 \div 3 = 7$	$21 \div 7 = 3$
$8 \times 3 = 24$	$3 \times 8 = 24$	$24 \div 3 = 8$	$24 \div 8 = 3$
$9 \times 3 = 27$	$3 \times 9 = 27$	$27 \div 3 = 9$	$27 \div 9 = 3$
$10 \times 3 = 30$	$3 \times 10 = 30$	$30 \div 3 = 10$	$30 \div 10 = 3$
$11 \times 3 = 33$	$3 \times 11 = 33$	$33 \div 3 = 11$	$33 \div 11 = 3$
$12 \times 3 = 36$	$3 \times 12 = 36$	$36 \div 3 = 12$	$36 \div 12 = 3$

Know by heart all multiplication facts, and division facts, for 3, up to 3 x 12



#### Practical ideas to help your child

Chanting is still an effective way to learn multiplication tables. Musical times tables CDs are also quite useful – children often learn the 'rhythm and rhyme' of a song quite quickly and therefore learn to recite and recall the facts.

It is really important that children are as confident with division facts as they are with multiplication facts.

- Practice the idea of 'Family of facts' e.g. if I know that  $6 \times 3 = 18$  ..... I also know  $3 \times 6 = 18$ , that  $18 \div 3 = 6$  and that  $18 \div 6 = 3$

#### Vocabulary

times	multiply	multiple of	
lots of	groups of	divided by	shared

## Spring Term 2: Know all doubles and halves of:

### Numbers to 20

### Multiples of 5 to 100

### Multiples of 50 to 500

Doubles and corresponding halves for all whole numbers from 1 – 100 → start with even numbers as easier to halve. When halving odd numbers there will always be  $\frac{1}{2}$  or 0.5 in the answer.

Doubles and halves of all multiples of 5 to 100 → remind children about identifying multiples of 5:

all multiples of 5 end in either a 5 or a 0 e.g., 5, 30, 45, 80, 95, etc

Doubles and halves of all multiples of 50 to 500 e.g., 50, 100, 150, 200, 250, 300, 350, 400, 450, 500.

- Encourage children to make links:  
Doubling → multiplying by 2  
Halving → dividing by 2
- Regular 5 / 10 minutes practice, quick-fire questions. 'Speed challenge': how many doubles and halves can you get right in 3 minutes? (using kitchen timer). Progress to 'Beat your record': can you get 5 more right than yesterday?

#### Vocabulary

double	multiply by 2	times by 2	$\times 2$
halve	divide by 2	$\div 2$	partition
hundreds	tens	ones	derive

### Know by heart all doubles of multiples of 5 up to 100...double 30,double 5

Double 10 = 20	Double 40 = 80
Double 15 = 30	Double 50 = 100
Double 20 = 40	Double 45 = 90
Double 30 = 60	Double 35 = 70



How many buns in 3 rows of 5?

- Websites: [www.mathszone.co.uk](http://www.mathszone.co.uk) has lots of links to interactive games e.g., 'hit the button' – doubles, halves, multiplication, division facts to select