# <u>Learning</u> 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.

### Year 2 Autumn Term 1: Know number bonds to 20.



Number bonds to 20			
:::::::::::::::::::::::::::::::::::::::	1 + 19	000000000	
000000000	2 + 18	000000000	
000000000	3 + 17	000000000	
000000000	4 + 16	000000000	16 + 4
0000000000	5 + 15	200000000000000000000000000000000000000	
	6 + 14	0000000000	
0000000000	7 + 13	200000000000000000000000000000000000000	13 + 7
000000000	8 + 12	***********	12 + 8
0000000000	9 + 11	2000000000	11+9
	10 + 10	000000000	10 + 10

### Practical ideas to help your child

Chanting is still an effective way to learn multiplication tables. Musical YouTube videos, such as the one on the QR code below, are very effective — children often learn the 'rhythm and rhyme' of a song quite quickly and therefore learn to recite and recall the facts.



Children can build numbers to 20 by using objects at home. Any building toys, such as blocks or Lego, are useful. Try giving your child a number of objects and ask them to build the number 20 by counting how many more objects need to be added.

### Vocabulary

add plus equals number bond number sentence number facts total pairs altogether make

## Autumn Term 2: Know multiplication and division facts for x2 table

```
0 \times 2 = 0
                          2 \div 2 = 1
 1 \times 2 = 2
                         + \div 2 = 2
 2 \times 2 = 4
                         6 \div 2 = 3
 3 \times 2 = 6
                         8 \div 2 = 4
4 \times 2 = 8
                         10 \div 2 = 5
 5 \times 2 = 10
                         12 \div 2 = 6
6 \times 2 = 12
                         14 \div 2 = 7
7 \times 2 = 14
                         16 \div 2 = 8
8 \times 2 = 16
                         18 \div 2 = 9
9 \times 2 = 18
                        20 \div 2 = 10
10 \times 2 = 20
                         22 \div 2 = 11
11 \times 2 = 22
                        24 \div 2 = 12
12 \times 2 = 24
               8 \times 2 =
```

Practical ideas to help your child

Chanting is still an effective way to learn multiplication tables. Musical times tables tapes 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.

Grouping things in twos is an effective way for your child to recite the x2 table. Group snacks, toys or objects in twos and encourage your child to recite the correct number sentence using the vocabulary below.

It is 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  $4\times2=8.....$  I also know  $2\times4=8$  that  $8\div2=4$  and that  $8\div4=2$ 

### Vocabulary

times multiply multiple of lots of groups of divided by shared

Great computer programs: Times table rock star



www.multiplication.com



https://www.topmarks.co.uk/maths-games/hit-the-button



www.mathszone.co.uk has lots of links to interactive games e.g., 'hit the button' — multiplication, division facts, number bonds to select

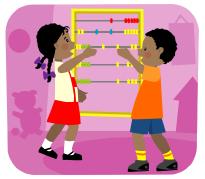


https://www.studyzone.tv/game275\_code13\_fe7c386\_fa4-ad7bb0ecd\_f05c8cec74-7

# St Matthew's C.E. Primary Academy



# Help your child to learn maths facts Year 2



Parent's and carer's guide to supporting their children with the 'Learning by Heart' programme

Autumn Term