'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.

Summer Term 1: Know all pairs of multiples of 50 that total 1000

50 + 950 = 1000	100 + 900 = 1000	150 + 850 = 1000
200 + 800 = 1000	250 + 750 = 1000	300 + 700 = 1000
350 + 650 = 1000	400 + 600 = 1000	450 + 550 = 1000
500 + 500 = 1000	550 + 450 = 1000	600 + 400 = 1000
650 + 350 = 1000	700 + 300 = 1000	750 + 250 = 1000
800 + 200 = 1000	850 + 150 = 1000	900 + 100 = 1000
950 + 50 = 1000		

Practical ideas to help your child

- Encourage your child to quickly identify multiples of 50 as numbers which have either 00 or 50 in the tens and units columns.
- Encourage links with number bonds to 100 e.g. 5 + 95 = 100 so 50 + 950 = 1000, etc
- Help your child to be logical and work through the numbers in a sequence as this helps speed and accuracy. Once they are able to list the facts, then try quick recall of facts by giving them a number and they have to think of its partner.

to find pairs of numbers that total 1000.

- Play games with number cards: _____

Summer Term 2: Know multiplication and division facts for the 7xtable (Reinforce knowledge of all the other tables up to 12)

0 x 7 = 0	7 x 0 = 0		
1 x 7 = 7	7 x 1 = 7	7 ÷ 7 = 1	7 ÷ 1 = 7
2 x 7 = 14	7 x 2 = 14	14 ÷ 7 = 2	14 ÷ 2 = 7
3 x 7 = 21	7 x 3 = 21	21 ÷ 7 = 3	21 ÷ 3 = 7
4 x 7 = 28	7 x 4 = 28	28 ÷ 7 = 4	28 ÷ 4 = 7
5 x 7 = 35	7 x 5 = 35	35 ÷ 7= 5	35 ÷ 5 = 7
6 x 7 = 42	7 x 6 = 42	42 ÷ 7 = 6	42 ÷ 6 = 7
7 x 7 = 49	7 x 7 = 49	49 ÷ 7 = 7	49 ÷ 7 = 7
8 x 7 = 56	7 x 8 = 56	56 ÷ 7 = 8	56 ÷ 8 = 7
9 x 7 = 63	7 x 9 = 63	63 ÷ 7 = 9	63 ÷ 9 = 7
10 x 7 = 70	7 x 10 = 70	70 ÷ 7 = 10	70 ÷ 10 = 7
11 x 7 = 77	7 x 11 = 77	77 ÷ 7 = 11	77 ÷ 11 = 7
12 x 7 = 84	7 x 12 = 84	84 ÷ 7 = 12	84 ÷ 12 = 7

Practical ideas to help your child

Chanting is still an effective way to learn multiplication tables. Musical times tables CDs/videos 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 4 x 7 = 28 ..... I also know 7 x 4 = 28,
that 28 ÷ 7 = 4 and that 28 ÷ 4 = 7

Fill in multiplication wheels:

Vocabulary

times	multiply	multiple of
lots of	groups of	divided by shared

https://www.youtube.com/watch?v=A8AMPutA9F8 — multiples of 50 to 1000 video

https://www.topmarks.co.uk/times-tables/coconut-multiples - 7x tables

https://www.topmarks.co.uk/maths-games/hit-the-button - 7 x tables

https://mathsframe.co.uk/en/resources/resource/306/Maths-Fishing-Multiplication - 7 x tables
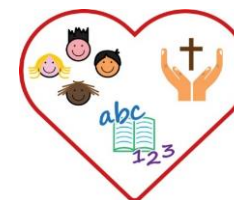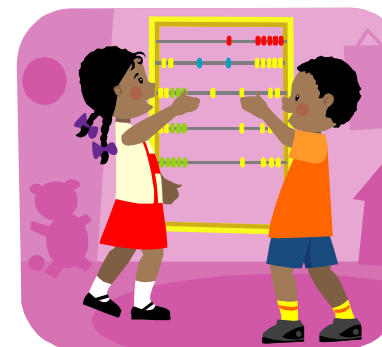
https://www.timestables.co.uk/games/ - all times tables

St Matthew's C.E. School and Nursery

Help your child to learn maths facts.
Year 4

Parent's and carer's guide to support children with the 'Learning by Heart' programme
Summer 2021