



Maths at St Meriadoc Junior Academy

At St Meriadoc Junior Academy, our intention is to create confident children, who can reason and solve real life problems. We aim for the children to have a healthy growth mind set, where they challenge themselves and learn from their mistakes. We are focused on our times tables as these are a building block in the foundations of maths. We also teach methods where the children can solve the problems using an effective method. We hope you find this helpful!

Number work at home

Children's number skills can be supported in all sorts of fun ways at home. Board games are a great way of making them familiar with the number system and addition and subtraction.

Here are some examples:

- Monopoly
- Yahtzee (pretty much anything with a dice)
- card games

Children can really enjoy inventing their own.



Money

Receiving (and spending!) pocket money can make children very keen learners in this area! Use any shopping trips, or a fantasy shopping spree at home, to encourage your child to be able to:

- Recognise all the coins
- Find totals and calculate change.



Get your child to work out holiday spending money by using conversion charts in newspapers to convert pounds to foreign currency. For older children, you could use the sales to help them practise their percentages (what is the price if there is 10% off etc).

Time

Telling the time is an area that many children struggle with, so giving them plenty of opportunities to practise can be very beneficial. Make sure that there are both traditional and digital clocks around the house for your child to practise reading the time to the nearest minute. Use timetables and TV guides to practise using a 24 hour clock and calculating time intervals. Give your child lots of time problems to solve. E.g.

"Tea will be 45 minutes. What time will it be ready?"



Times Tables

Times tables are very important in day to day life as the children grow up. We have Times Table Rock Stars for online practice, which the children really enjoy playing on in school. However if you want to keep the learning fun you can also play some times table games.

Tin Can Alley—Collect 10-12 tin cans write $\times 1-12$ on them, use a tennis ball to knock them down. The ones that they knock down if they can get the answer right they get to keep it. If they don't rack it back up and go again. For independence write the answer on the bottom!

Times Table Bingo — Choose 2 times tables e.g. 3 and 4 — write down 9 numbers in rows of 3. Read out different times table facts until all the numbers are crossed off, Bingo!

Speed Tables—Children choose a times table. Write it out as fast as they can, children work on accuracy (getting it all right) and speed (Beating their previous time). This can be repeated with different times tables.

Keep fit Challenge—Children chant their times tables while exercising, e.g. 12 star jumps with the three times table would be 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36. You can repeat with different time tables and exercises to challenge them.



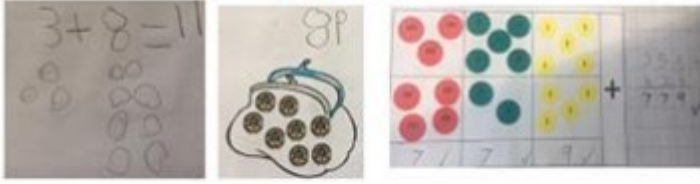
18	8	24
20	2	10
40	14	6



$1 \times 3 = 3$	$1 \times 4 = 4$	$1 \times 5 = 5$	$1 \times 6 = 6$
$2 \times 3 = 6$	$2 \times 4 = 8$	$2 \times 5 = 10$	$2 \times 6 = 12$
$3 \times 3 = 9$	$3 \times 4 = 12$	$3 \times 5 = 15$	$3 \times 6 = 18$
$4 \times 3 = 12$	$4 \times 4 = 16$	$4 \times 5 = 20$	$4 \times 6 = 24$
$5 \times 3 = 15$	$5 \times 4 = 20$	$5 \times 5 = 25$	$5 \times 6 = 30$
$6 \times 3 = 18$	$6 \times 4 = 24$	$6 \times 5 = 30$	$6 \times 6 = 36$
$7 \times 3 = 21$	$7 \times 4 = 28$	$7 \times 5 = 35$	$7 \times 6 = 42$
$8 \times 3 = 24$	$8 \times 4 = 32$	$8 \times 5 = 40$	$8 \times 6 = 48$
$9 \times 3 = 27$	$9 \times 4 = 36$	$9 \times 5 = 45$	$9 \times 6 = 54$
$10 \times 3 = 30$	$10 \times 4 = 40$	$10 \times 5 = 50$	$10 \times 6 = 60$
$11 \times 3 = 33$	$11 \times 4 = 44$	$11 \times 5 = 55$	$11 \times 6 = 66$

Addition

Pictorial



Abstract

16 + 23 = 39

10 + 5 = 15
6 + 3 = 9
15 + 9 = 24

14,136 + 3,258 = 17,394

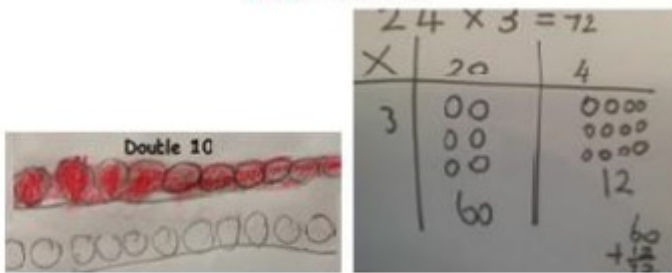
Step 1: 6 + 8 = 14 Put the 4 in the units and the 1 in the tens (1) below to add on in the next column

Step 2: 3 + 4 = 7 then add the 1 below = 8

Step 3: Add the last column 2 + 5 = 7 if it is a two digit number remember to write the whole answer

Multiplication

Pictorial



Abstract

25 x 36

	10	10	10	6
10	100	100	100	60
10	100	100	100	60
6	60	60	60	36

600 + 150 = 750
750 + 30 = 780
780 + 30 = 810

123 x 5

1st Step

$$\begin{array}{r} 123 \\ \times 5 \\ \hline 615 \end{array}$$

2nd Step

$$\begin{array}{r} 123 \\ \times 5 \\ \hline 15 \end{array}$$

3rd Step

$$\begin{array}{r} 123 \\ \times 5 \\ \hline 615 \end{array}$$

KIRFs—Key Instant Recall Facts

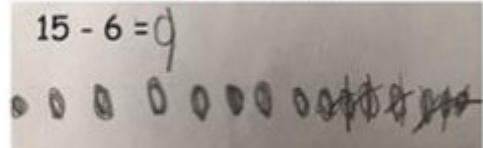
These are fact sheets that are based around the foundations of maths understanding. They have been differentiated for each year group appropriately and are essential to deepening understanding of maths.

Maths Methods

At St Meriadoc Junior Academy, we use 3 different stages of methods: **Concrete > Pictorial > Abstract**. These help to deepen the children's understanding of the operation they are using.

Subtraction

Pictorial



Abstract

376 - 93 = 283

426 - 375 = 51

400 - 300 = 100
20 - 70 = -50
6 - 5 = 1
100 - 50 + 1 = 51

H T U

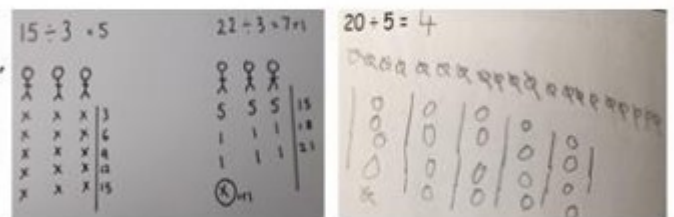
300 becomes 200, because one hundred has been exchanged into 10 tens.

1 can't do 20 - 70 so I will exchange one hundred for 10 tens

$$\begin{array}{r} 376 \\ - 93 \\ \hline 283 \end{array}$$

Division

Pictorial



Abstract

Division as repeated subtraction

50 ÷ 10 = ?

50 ÷ 10 = 5 groups of 10

84 ÷ 7 = 12

186 ÷ 6 =

$$\begin{array}{r} 031 \\ 6 \overline{) 186} \\ \underline{6} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

no groups of 6 can be made

1 x 6 = 6

3 x 6 = 18