

Have a go at these questions.

How would you help a child to understand them?

Write the next number sentence in the pattern.

$$1 + 2 + 3 = 6$$


$$2 + 3 + 4 = 9$$

$$3 + 4 + 5 = 12$$

$$4 + 5 + 6 = 15$$

$$\square + \square + \square = \square$$

Sam plays a maths game.

Each  is equal to **2** points.

$$\text{leaf} + \text{acorn} + \text{acorn} = 10 \text{ points}$$

How many points is **one**  equal to?

points



GILES BROOK SCHOOL

Mathematics Workshop

Years 1-3



Mathematics Workshop

Years 1-3

Aims

- For you to feel more knowledgeable and confident about the what, why and how of your child's learning in Maths
- To know how you can support your child at home with Maths

Our curriculum intent...

We want children to be **secure in their **knowledge** and **understanding** of maths and **fluent in their application** of it, so that they can find **enjoyment** in solving mathematical problems with growing **confidence** and have the necessary skills to move on successfully to the next stage of their education.**

A Mastery approach to teaching Mathematics....

- Secure in knowledge of number
- Able to apply knowledge when solving calculations
- Can make connections between concepts
- Can recognise and explain patterns



Value

Belief

EFFORT



Helpful Videos...

Addition	Subtraction	Multiplication	Division	Fractions, Decimals & Percentage		
Concrete and pictorial resources https://www.youtube.com/watch?v=KNt2uP8VBM0&list=PLApB0B2txnj7v3Is-KXwwpIDX511kNo_I&index=8	Subtraction using a 10 frame https://www.youtube.com/watch?v=Cc4wrkXsKj8	Repeated addition on a number line https://www.youtube.com/watch?v=wksK99VN7Cs	Sharing equally using arrays https://www.youtube.com/watch?v=mwig70aQuHI&list=PLZXaB-dpg4g0v8JWmtV1hYleAOp0GAPQ&index=2	What are fractions? https://www.youtube.com/watch?v=Cy2qMba9ruk	Finding fractions of amounts of objects and numbers https://www.youtube.com/watch?v=TXJOIs7vXMs	Equivalent fractions https://www.youtube.com/watch?v=qcHHd6HizI
Number line https://www.youtube.com/watch?v=6i1XG26XgKQ&list=PLApB0B2txnj7v3Is-KXwwpIDX511kNo_I&index=11	Number line https://www.youtube.com/watch?v=hES1mvRavp4	Arrays https://www.youtube.com/watch?v=XOyOVDmIUdo	Short division https://www.bbc.co.uk/bitesize/topics/z36tyrd/articles/zgxdfcw	Adding and subtracting fractions https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h	Multiplying fractions https://farmboroughprimary.co.uk/wp-content/uploads/2020/04/Multiplying-Fractions-Landscape.mp4?_af=3	Dividing fractions by integers https://www.bbc.co.uk/bitesize/articles/zhw8wfy
Formal written method https://www.youtube.com/watch?v=iwNA3uEC14I	Formal written method https://www.bbc.co.uk/bitesize/topics/zy2mn39/articles/zc78srd	Short multiplication (x a single digit) https://www.youtube.com/watch?v=k68CPfehTE	Long Division https://www.youtube.com/watch?v=ZFYLSouMYs4&t=93s	Converting improper fractions to mixed numbers https://www.bbc.co.uk/bitesize/articles/z4vpscw	Decimals explained https://www.youtube.com/watch?v=t9vqm2eM5mk	Compare and order decimals https://www.bbc.co.uk/bitesize/articles/zqn7wnb
		Long multiplication (x by 2 digits or more) https://farmboroughprimary.co.uk/wp-content/uploads/2020/04/Long-Multiplication-Trim.mp4?_af=2	Multiplying and dividing by 0, 1, 10 and 100 https://www.bbc.co.uk/bitesize/topics/z36tyrd/articles/z2fkwx	Fractions to decimals https://www.youtube.com/watch?v=mtX8mhHtqrc&list=PLZXaB-dpg4g03cgU7eOGVfz9iQkAhtK9X&index=3	Adding and subtracting decimals https://www.bbc.co.uk/bitesize/articles/zyhcbqt	Multiplying decimals by a whole number https://www.youtube.com/watch?v=BAwkn4hGGyg
				Percentages explained https://www.bbc.co.uk/bitesize/topics/znjqlfr/articles/z8ws3k7	Equivalent fractions, decimals and percentages https://www.youtube.com/watch?v=0AItcfW7nFo&list=	Finding percentage of an amount https://www.bbc.co.uk/bitesize/articles/zvxnv82

Key Knowledge

Number Facts - number bonds and times tables

Addition and subtraction facts

The full set of addition calculations that pupils need to be able to solve with automaticity are shown in the table below. Pupils must also be able to solve the corresponding subtraction calculations with automaticity.

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

[EYFS Curriculum](#)

[Multiplication Check Year 4](#)





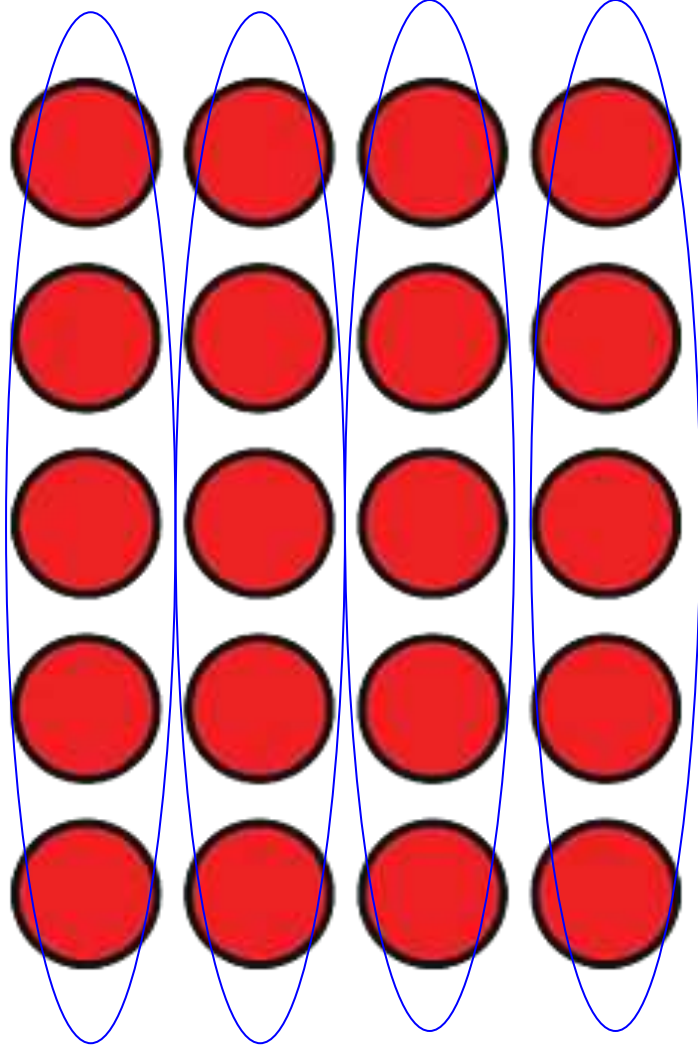
$$5 + 7 = 12$$

$$5 + _ = 12$$

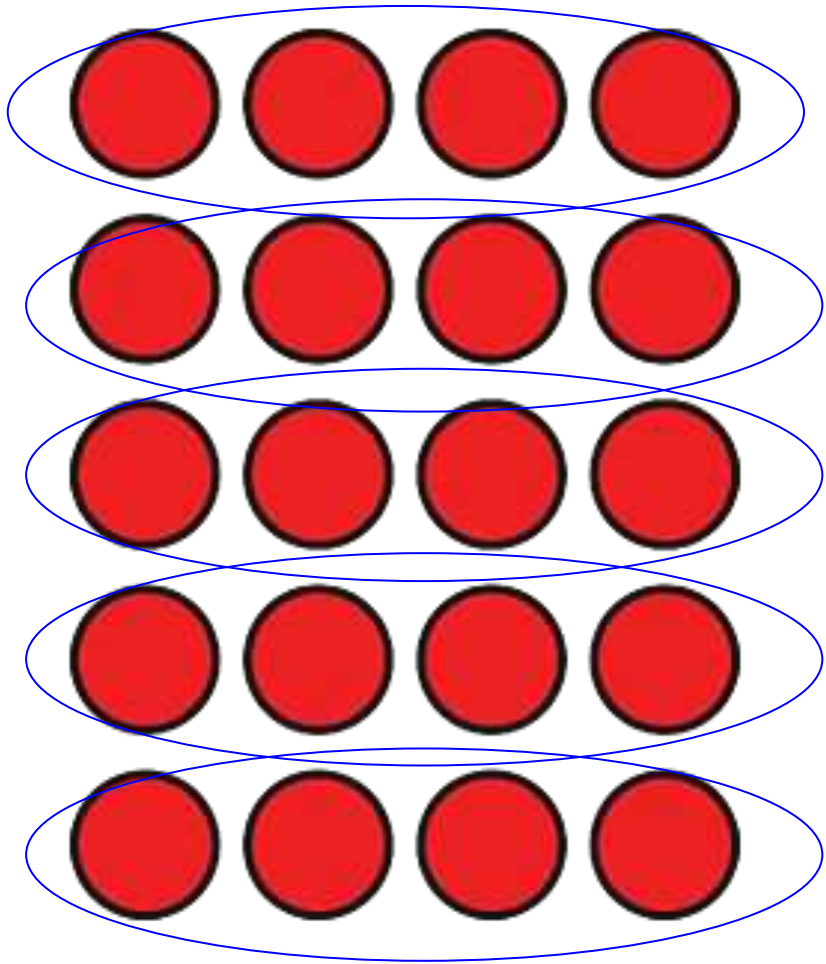
$$7 + _ = 12$$

$$12 = 7 + _$$

By end of Year 1
children need to know
number bonds to and
within 20.



$$4 \times 5 = 20$$



$$4 \times 5 = 20$$

$$5 \times 4 = 20$$

$$20 \div 5 = 4$$

$$20 \div 4 = 5$$

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Unit 1	-Number bonds within and to 5 -Number bonds within and to 10 -Number bonds within and to 20 -Experience of counting in 1s, 2s, 5s, and 10s (forwards and backwards).	Number bonds within and to 10 and 20.	Number bonds within and to 10 and 20.	4x, 8x	4x, 8x	3x, 6x, 9x
Unit 2		1x, 2x	2x, 4x	6x, 12x	3x, 6x	11x, 12x
Unit 3		5x	4x, 8x,	x9	6x, 12x	7x, 8x
Unit 4		10x	3x	x7	x7	Data Informed
Unit 5		SATS	3x, 6x	x11/Practise MTC	x9	SATS
Unit 6		Revision	Revision	Revision/MTC	Revision	Revision

Number Facts - number bonds and times tables

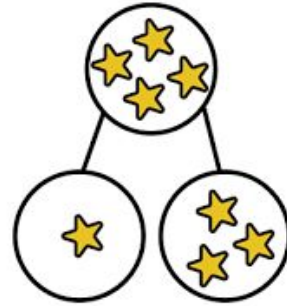


<https://play.numbots.com/#/intro>

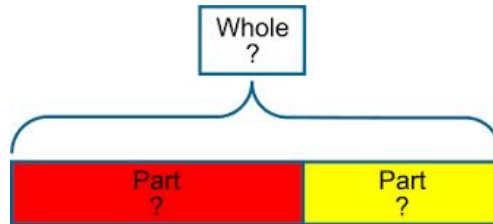


<https://play.ttrockstars.com/>

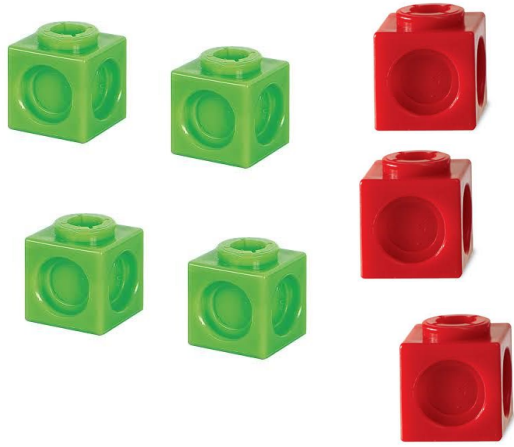
Concrete, Pictorial, Abstract - The CPA approach



$$\begin{array}{r} 6 \cancel{7} 12 \\ 56 \overline{) } \\ \underline{16} \end{array}$$

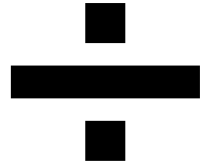


Concrete, Pictorial, Abstract - The CPA approach

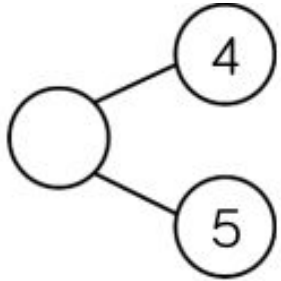
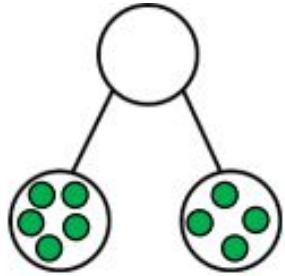


$$4 + 3 = 7$$

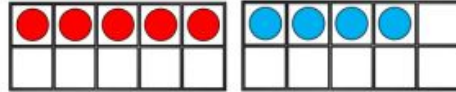
The Four Operations...



The Four Operations... Addition and Subtraction



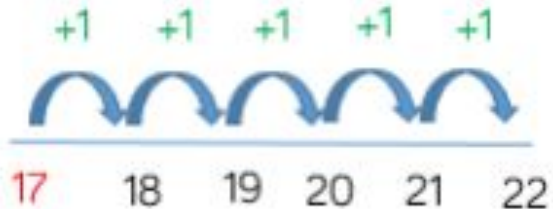
There are 5 red cars and 4 blue cars. How many cars are there altogether?



$$\square + \square = \square$$

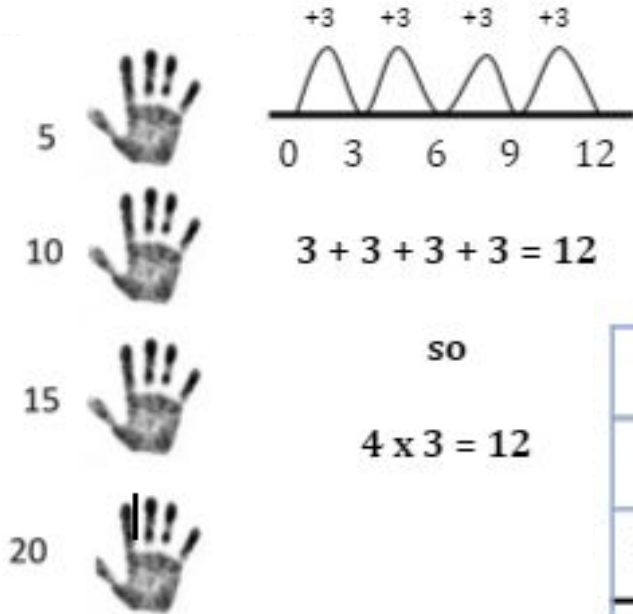
$$\square = \square + \square$$

$$17 + 5 =$$



$$\begin{array}{r} 129 \\ +145 \\ \hline 274 \\ \hline 1 \end{array}$$

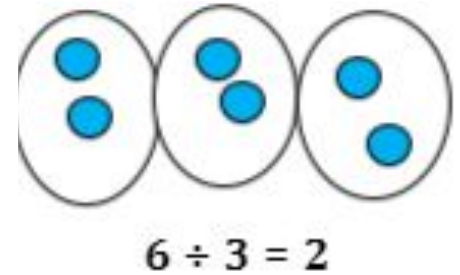
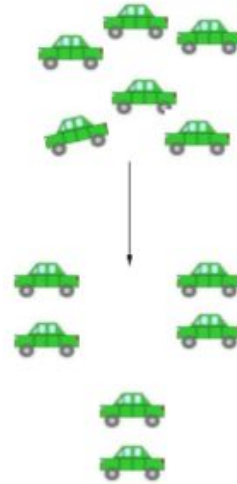
The Four Operations... Multiplication and Division



so

$4 \times 3 = 12$

	T	O
	3	4
x		5
<hr/>		
1	7	0
1	2	



$48 \div 4$

$52 \div 4$

$60 \div 3$

Supporting Maths learning at home

- Be positive
- Encourage practise of facts whenever possible
- Use our calculation policy and bank of videos to help with homework
- If unsure, contact the class teacher or encourage your child to ask their teacher