



Somerset Bridge Primary School

Aspire - Brave - Care - Collaborate

The four operations used for Maths at
Somerset Bridge Primary in Year 2.

Year 2

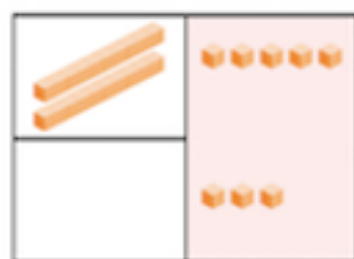
Addition

Using concrete objects and pictorial representations to add a 2-digit number with a 1 digit number.

Use 'regrouping' to describe rearranging a column.

Use the vocabulary of 'Addend, addend and sum.'

$$\begin{array}{c} 1 + 7 = 8 \\ \text{addend} \quad \text{addend} \quad \text{sum} \end{array}$$

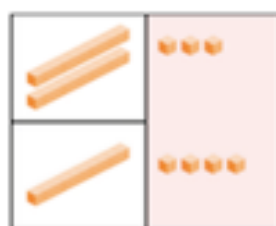


tens	ones
2	5
+	3
<hr/>	
	8

Using concrete objects and pictorial representations to add a 2-digit number and 10s number.

Use the language of ones/units.

Step 1 Add the ones.
3 ones + 4 ones = 7 ones



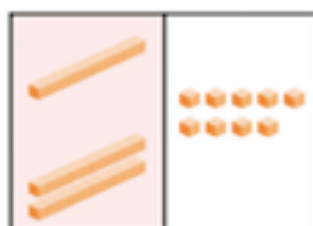
tens	ones
2	3
+	4
<hr/>	
	7

Step 1 Add the ones.



tens	ones
1	9
+	0
<hr/>	
	9

Step 2 Add the tens.
1 ten + 2 tens = 3 tens



tens	ones
1	9
+	0
<hr/>	
2	9
<hr/>	
3	9

$$19 + 20 = 39$$

Using concrete objects and pictorial representations to add two 2-digit numbers.

Step 2 Add the tens.
2 tens + 1 ten = 3 tens



$$23 + 14 = 37$$

	tens	ones
23	2	3
+ 14	1	4
	3	7

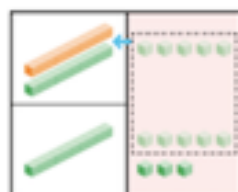
Adding with renaming

Add 15 and 18.

Use  to help you add.

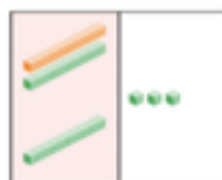


Step 1 Add the ones.
5 ones + 8 ones = 13 ones
Regroup the ones.
13 ones = 1 ten and 3 ones



	tens	ones
15	1	5
+ 18	1	8
	1	3

Step 2 Add the tens.
1 ten + 1 ten + 1 ten = 3 tens



$$15 + 18 = 33$$

	tens	ones
15	1	5
+ 18	1	8
	1	3
	2	0
	3	3

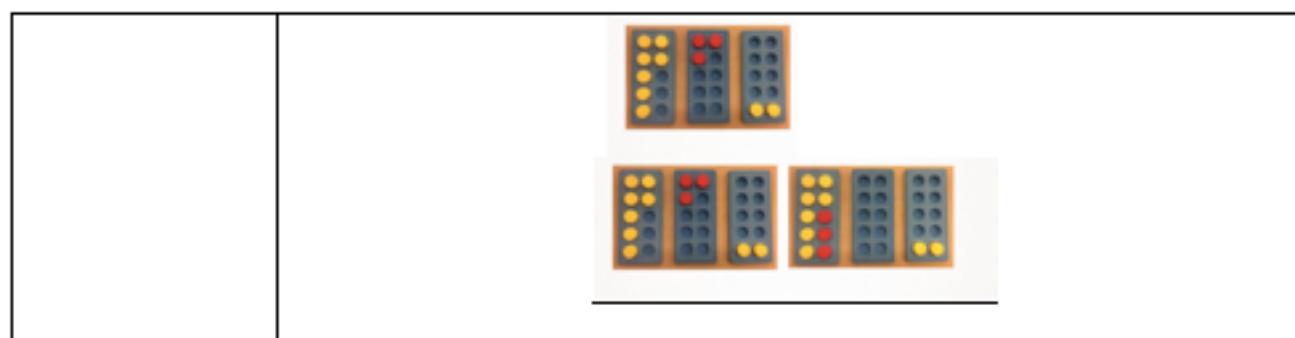
Children use place value counters.

$$\begin{aligned} 40 + 2 &= 42 \\ 2 + 40 &= 42 \\ 42 &= 40 + 2 \\ 42 &= 2 + 40 \end{aligned}$$



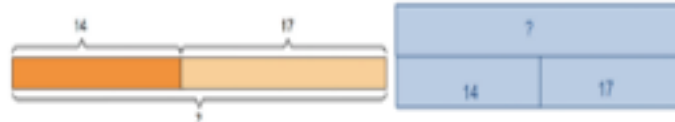
Using concrete objects and pictorial representations to add 3 single digit numbers.

$$7+3+2 = \quad \text{leads to } 10 + 2 =$$



Using the bar to find missing digits.
It is important for children to use the bar in this way to encourage the use of it to aid with problem solving.

Helen has 14 breadsticks. Her friend has 17. How many do they have altogether?



Subtraction

Using concrete objects and pictorial representations to subtract a 1 digit number from a 2 digit number.

Use the vocabulary of 'Minuend, subtrahend and difference.'

$$\begin{array}{c} 8 - 1 = 7 \\ \text{minuend} \quad \text{subtrahend} \quad \text{difference} \end{array}$$

Step 1 Subtract the ones.
 $8 \text{ ones} - 3 \text{ ones} = 5 \text{ ones}$



tens	ones
2	8
-	3
	5

Step 2 Subtract the tens.



tens	ones
2	8
-	3
2	5

$$28 - 3 = 25$$

Using concrete objects and pictorial representations to subtract a multiple of 10 from 2 digit number.

Step 1 Subtract the ones.



tens	ones
3	6
- 2	0
<hr/>	
	6

Step 2 Subtract the tens.
3 tens - 2 tens = 1 ten



tens	ones
3	6
- 2	0
<hr/>	
1	6

$$36 - 20 = 16$$

Using concrete objects and pictorial representations to subtract a 2 digit number from 2 digit number.

Subtract 24 from 37.

Step 1 Subtract the ones.
7 ones - 4 ones = 3 ones

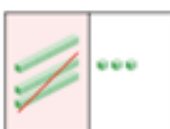


tens	ones
3	7
- 2	4
<hr/>	
	3

Use  to help you subtract.



Step 2 Subtract the tens.
3 tens - 2 tens = 1 ten



tens	ones
3	7
- 2	4
<hr/>	
1	3

$$37 - 24 = 13$$

Recognise and use the inverse relationship between addition and subtraction

?	
23	53
76	
23	?

Use this to check calculations and solve missing number problems.

Multiplication

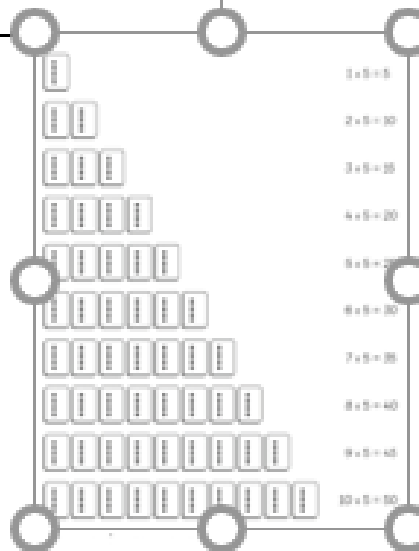
Skip counting in multiples of 2, 3, 5, 10 from 0



Recall and use multiplication facts for the multiplication tables 2, 5 and 10.

Use the vocabulary of 'Factor, multiplier, multiplicand and product.'

$2 \times 4 = 8$
 multiplier multiplicand product
 factor factor product



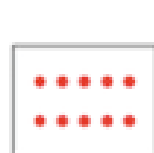
I can use multiplication (x) and equal (=) sign when writing out my times tables.



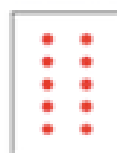
Multiplication is commutative

Pupils should understand that an array can represent different equations and that, as multiplication is commutative, the order of the multiplication does not affect the answer.

How many dots are there?

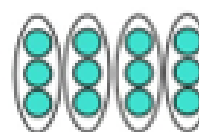


$$2 \times 5 = 10$$

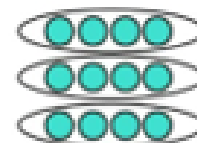


$$5 \times 2 = 10$$

2×5 is equal to 5×2 .

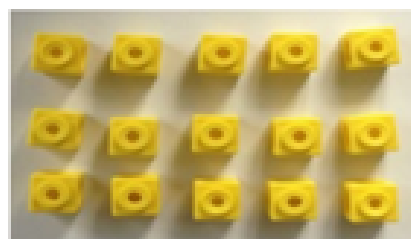


$$12 = 3 \times 4$$



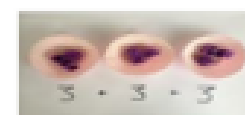
$$12 = 4 \times 3$$

Solve multiplication problems in context using arrays and repeated addition



$$3 \times 5 = \square$$

$$5 \times 3 = \square$$



$$3 + 3 + 3 = 9$$

Division

Recall and use division facts for the multiplication tables 2, 5 and 10.

Use the vocabulary of 'Dividend, divisor and quotient.'

$$\begin{array}{c} 32 \div 4 = 8 \\ \text{dividend} \quad \text{divisor} \quad \text{quotient} \end{array}$$

$$10 \div 2 = \square$$

$$20 \div 2 = \square$$

$$30 \div 2 = \square$$

$$50 \div 2 = \square$$

$$60 \div 2 = \square$$

$$100 \div 2 = \square$$

$$\square \times 5 = \square$$

$$\square \times 2 = \square$$

$$\square \times 2 = \square$$

$$\square \times 5 = \square$$

$$\square \times 2 = \square$$

$$\square \times 10 = \square$$

Fact families to show the relationship between multiplication and division.

2, 4 and 8

$$2 \times 4 = 8$$

$$4 \times 2 = 8$$

$$8 \div 2 = 4$$

$$8 \div 4 = 2$$

$$\begin{array}{rcl} 5 \times 4 & = & 20 \\ 4 \times 5 & = & 20 \\ 20 \div 4 & = & 5 \\ 20 \div 5 & = & 4 \end{array}$$

Solve division problems in context using concrete objects by sharing

There are 18 sausages.



Put 18 sausages equally on 2 plates.



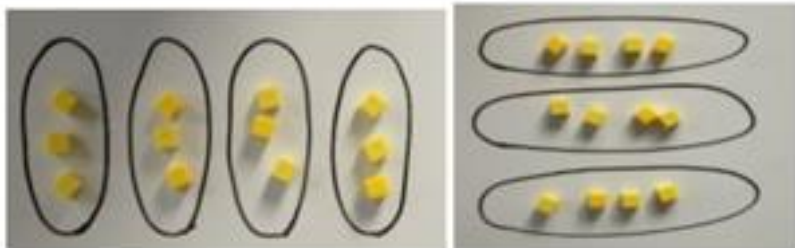
$$2 \times 9 = 18$$



There are 9 sausages on each plate.

$$18 \div 2 = 9$$

Solve division problems in context using arrays



I can solve division as grouping.

Put 10 buns in groups of 2.
How many plates are there?

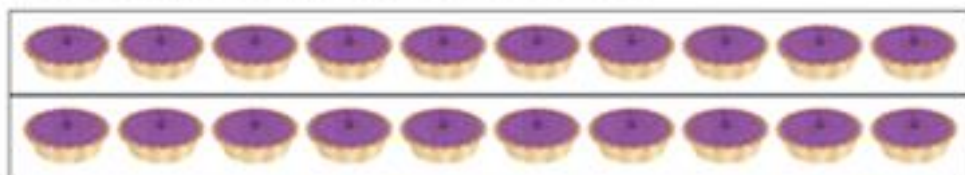


Put into groups of 5.
There are groups.

I can use the inverse.

This should be taught alongside both multiplication and division.

Make a family of multiplication and division facts.



$$2 \times 10 = 20 \quad \text{—————} \quad 20 \div 10 = \text{$$

$$10 \times 2 = 20 \quad \text{—————} \quad 20 \div 2 = \text{$$