

KS1 Number Facts Fluency Workshop

1. What number facts do KS1 children need to know?
2. How to learn addition and subtraction facts.
3. How you can help at home.

Number Facts summary

	National Curriculum
EYFS	<p>Have a deep understanding of numbers to 10, including the composition of each number.</p> <p>Subitise (recognise quantities without counting) up to 5</p> <p>Automatically recall number bonds up to 5 and some number bonds to 10 including double facts.</p>
Year 1	<p>Given a number, identify 1 more and 1 less</p> <p>Identify and represent numbers using objects and pictorial representations</p> <p>Read and write numbers from 1 to 20 in numerals and words</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p> <p>Represent and use number bonds and related subtraction facts within 20</p> <p>Add and subtract one-digit and two digit numbers to 20, including 0</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$</p>
Year 2	<p>Solve problems with addition and subtraction</p> <ul style="list-style-type: none"> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - Applying their increasing knowledge of mental and written methods <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Add and subtract numbers using concrete objects, pictorial representations and mentally including:</p> <ul style="list-style-type: none"> - A two-digit number and 1s - A two-digit number and 10s - 2 two-digit numbers - Adding 3 one digit numbers <p>Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>

Number Facts summary

	National Curriculum	At BPA
EYFS	<p>Have a deep understanding of numbers to 10, including the composition of each number.</p> <p>Subitise (recognise quantities without counting) up to 5</p> <p>Automatically recall number bonds up to 5 and some number bonds to 10 including double facts.</p>	<p>Secure fluency in number bonds up to 5.</p>
Year 1	<p>Given a number, identify 1 more and 1 less</p> <p>Identify and represent numbers using objects and pictorial representations</p> <p>Read and write numbers from 1 to 20 in numerals and words</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</p> <p>Represent and use number bonds and related subtraction facts within 20</p> <p>Add and subtract one-digit and two digit numbers to 20, including 0</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$</p>	<p>Develop fluency in addition and subtraction facts within 10.</p> <p>Compose numbers to 10 from 2 parts and partition numbers to 10 into parts.</p> <p>Read, write and interpret equations containing + - and = and relate these expressions to real-life contexts.</p>
Year 2	<p>Solve problems with addition and subtraction</p> <ul style="list-style-type: none"> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - Applying their increasing knowledge of mental and written methods <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Add and subtract numbers using concrete objects, pictorial representations and mentally including:</p> <ul style="list-style-type: none"> - A two-digit number and 1s - A two-digit number and 10s - 2 two-digit numbers - Adding 3 one digit numbers <p>Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>Secure fluency in addition and subtraction facts within 10.</p> <p>Add and subtract across 10.</p> <p>Develop fluency in facts to 20.</p> <p>Add and subtract within 100 by applying related one-digit addition and subtraction facts.</p>

+	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

2) Adding 1

4) Doubles

6) Adding 0

8) No family

12) Bridging/
compensating

3) Adding 2

5) Near doubles

7) Bonds of 10

9) Adding 10

+	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

2) Subtracting 1

4) Doubles

6) Subtracting 0

8) No family

12) Bridging/ compensating

3) Subtracting 2

5) Near doubles

7) Bonds of 10

9) Subtracting 10

Spot the difference

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

2) Subtracting I

4) Doubles

6) Subtracting 0

8) No family

I2) Bridging/ compensating

3) Subtracting 2

5) Near doubles


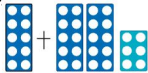
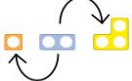




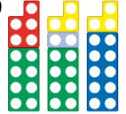

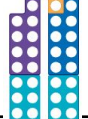




7) Bonds of 10

9) Subtracting 10

Spot the difference

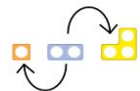
[illegible]

BPA Calculation Strategies: generalisations

1) Subitise  4	Know the value just by looking at the shape.	9) Adding and subtracting 10 	Find ten more and ten less/fewer by adding and subtracting 10. When we add ten or subtract ten, the ones digit stays the same.
2) 1 more and 1 less 	When we add one, we get the next counting number. When we subtract one, we get the previous counting number (e.g. $3 + 1 = 4$, $4 - 1 = 3$)	10) Adding and subtracting 9 	If we add 10 to a number and subtract 1, it is the same as adding 9. If we know $8 + 10 = 18$, $8 + 9$ is 17. If we subtract one from the addend, we subtract one from the total.
3) 2 more and 2 less 	If we add two to a number, we go from odd to next odd, or even to next even. If we subtract two to a number, we go from odd to previous odd, or even to previous even.	11) Addition and subtraction facts of 11 	If I know that $8 + 2 = 10$, then $8 + 3 = 11$. If I know that $10 - 2 = 8$ then $11 - 3 = 8$.
4) Doubles 	Memorise doubles of numbers to 10 using a visual approach. When we add two numbers that are the same size we call it a double fact.	12) Make 10 and then... 	Additions which cross the 10 boundary can be calculated by 'Making Ten' first, to complete the decade, then adding on the remaining amount. E.g. $8 + 6$ can be calculated by thinking ' $8 + 2 = 10$ and 4 more makes 14'. The same strategy can be applied to subtractions through 10.
5) Near double 	We can use our double facts to calculate near doubles. If we know $4 + 4 = 8$, then $4 + 5 = 9$ (one more), and $4 + 3 = 7$ (one less). If we add one to an addend, the total increases by 1.	13) Adjust it 	Any addition and subtraction can be calculated by adjusting from a fact you know already, e.g. $6 + 9$ is one less than $6 + 10$.
6) 0 strategy 	When we add 0 to or subtract 0 from another number, the total remains the same. If we subtract a number from itself, the difference is 0.	14) Swap it 	When the order of two numbers being added (addends) is exchanged, the sum remains the same. E.g. $1 + 8 = 8 + 1$. Sometimes reversing the order of the two addends makes addition easier.
7) Adding and subtracting to 10 	Go beyond just recalling the pairs of numbers that add to make 10. Make sure that we can spot addition and subtraction calculations which we can use the number bonds to 10 to solve.	15) Spot the difference 	Adjacent odds and evens have a difference of 2. Difference is written as subtraction.
8) All addition and subtraction facts within 10 	Focus especially on 6, 7, 8, 9. Review previously learnt facts	16) Constant difference 	$6 - 2 = 4$. $5 - 1 = 4$ If you subtract one from the minuend and the subtrahend, the difference stays the same.

Notes on vocabulary:

Addition: ___ is equal to ___ plus ___ plus ___ is equal to ___ .
 The parts are called the 'ADDEND' and the whole is called the 'SUM'.
 Subtraction: ___ minus ___ is equal to ___ .
 The whole is called the 'MINUEND'; the part being subtracted is called the 'SUBTRAHEND'; the other part is the 'DIFFERENCE' between the whole and the part subtracted.

2) 1 more and 1 less

Addition: ___ is equal to ___ plus 1; ___ plus 1 is equal to ___ .
 Subtraction: ___ minus 1 is equal to ___ .
 1 less than ___ is ___ ; 1 more than ___ is ___ .

3) 2

Addition: ___ is equal to ___ plus 2; ___ plus 2 is equal to ___ .
 Subtraction: ___ minus 2 is equal to ___ .
 2 less than ___ is ___ ; 2 more than ___ is ___ .

4) Doubles

Double ___ is ___ ; half of ___ is ___ .

5) Near double

Double ___ is ___ ; add 1 is ___ .
 Double ___ is ___ ; subtract 1 is ___ .

6) 0 strategy

Addition: ___ is equal to ___ plus 0; ___ plus 0 is equal to ___ .
 Subtraction: ___ minus 0 is equal to ___ .

7) Adding and subtracting 10

___ needs ___ to make 10
 I have ___, you have ___ ;
 together we have 10!
 10 is equal to ___ plus ___ .
 ___ counters is ___ fewer than 10 counters.

8) All addition and subtraction facts within 10**9) Adding and subtracting 10**

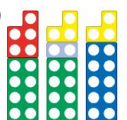
Addition: ___ is equal to ___ plus 10; ___ plus 10 is equal to ___ .
 Subtraction: ___ minus 10 is equal to ___ .
 10 less than ___ is ___ ; 10 more than ___ is ___ .

10) Adding and subtracting 9

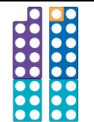
Addition: To add 9, first I add 10. ___ plus 10 is equal to ___ . Then I subtract 1. ___ minus 1 is equal to ___ .
 Subtraction: To subtract 9, first I subtract 10. ___ minus 10 is ___ . Then I add 1 back on. ___ plus 1 is equal to ___ .

11) Addition and subtraction facts of 11

10 needs ___ to make ___ ; ___ is made of 10 and ___ .

12) Make 10 and then...

Addition: First, I split the ___ ; ___ can split into ___ and ___ . Then ___ plus ___ is equal to 10... and 10 plus ___ is equal to ___ .
 Subtraction: First, I split the ___ ; ___ can split into ___ and ___ . ___ subtract ___ to reach 10; 10 subtract ___ is ___ .

13) Adjust it

Addition: I know that ___ plus ___ is equal to ___ , so I know ___ plus ___ is equal to ___ .
 Subtraction: I know that ___ minus ___ is equal to ___ , so I know ___ minus ___ is equal to ___ .

14) Swap it

Addition: ___ plus ___ is the same as ___ plus ___ .
 Subtraction: ___ minus ___ is not the same as ___ minus ___ .

15) Spot the difference

The difference between ___ and ___ is ___ .

16) Constant difference

___ minus ___ is the same as ___ minus ___ .

Addition and subtraction facts: the 'phonics' of Maths!

$$36 + 45 = \underline{\quad}$$

$$362 - 124 = \underline{\quad}$$

Addition and subtraction facts: the 'phonics' of Maths!

$$36 + 45 = \underline{\quad}$$

$$362 - 124 = \underline{\quad}$$

$$\begin{array}{r} 36 \\ | \\ 70 \end{array} + \begin{array}{r} 45 \\ | \\ 11 \end{array} = 81$$

Informal/mental addition by partitioning:

Root addition facts

$$3 + 4, 6 + 5$$

$$\begin{array}{r} 362 \\ 124 \\ \hline 238 \end{array}$$

Formal subtraction with column method

Root subtraction facts

$$12 - 4, 5 - 2, 3 - 1$$

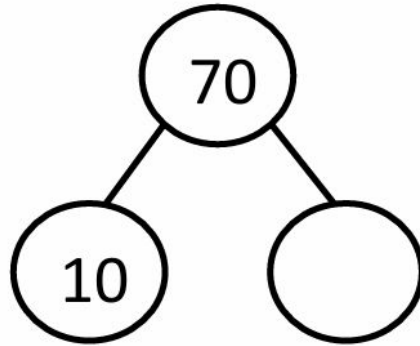
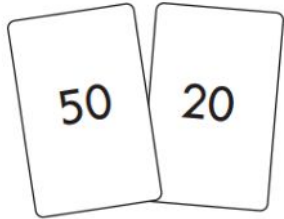
KS1 SATS paper

Partitioning

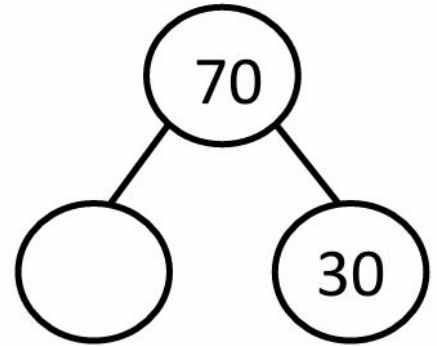
13 Each pair of cards has a **total of 70**

Write numbers to complete the pairs.

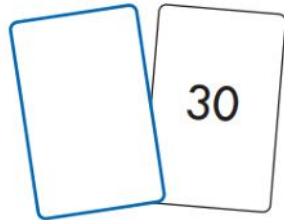
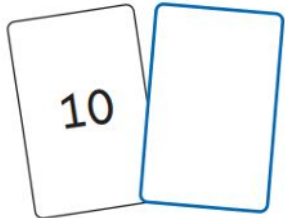
One is done for you.



$$10 + \underline{\quad} = 70$$



$$\underline{\quad} + 30 = 70$$



The importance of becoming fluent in these facts:

- If children are not fluent in these facts, then when they are solving more complex problems the working memory is taken up by calculating basic facts, and children have less working memory to focus on solving the actual problem.
So - fluency in basic facts allows children to tackle more complex maths more effectively.
- Fluency is one of the 3 aims of the National Curriculum. SATs for 2016 and beyond, heavily tests children's fluency.

What do we mean by fluent?

Counting as a strategy

Deriving a fact

Knowing the fact 'by heart'

2. How to learn addition and subtraction facts.

Some key ideas used at BPA...

Concrete, Pictorial, Abstract (CPA) Approach

CONCRETE

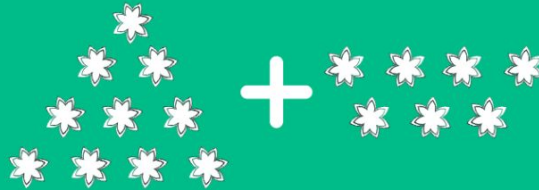


Children might begin by handling real objects...



...then using physical representations of them.

PICTORIAL



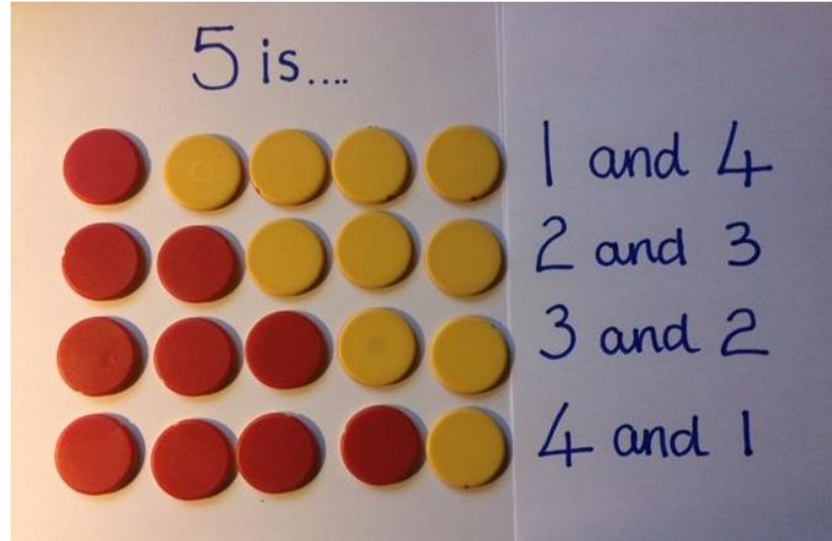
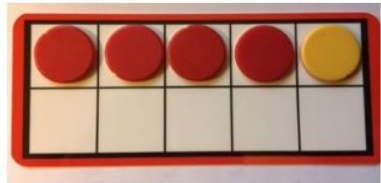
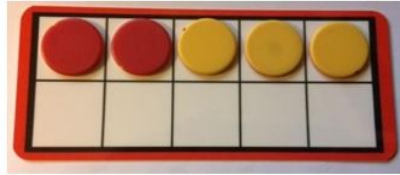
Drawings act as a bridge between the concrete objects children have been using and the abstract symbols they must learn to use.

ABSTRACT

Finally, children learn to use abstract symbols to solve problems.

$$10 + 7 = 17$$

Numbers are composed of other numbers:



$$1 + 4 = 5$$

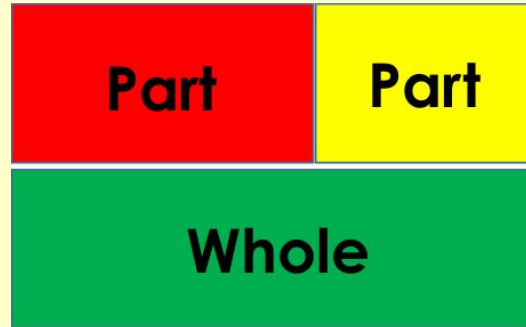
$$2 + 3 = 5$$

etc

Numicon



The Part Whole Model



Put 5 cupcakes on two plates.

An illustration showing a box of 5 cupcakes being divided into two plates. The top plate has 2 cupcakes (one pink, one chocolate), and the bottom plate has 3 cupcakes (one pink, one blue, one yellow). Red arrows point from the box to the plates.

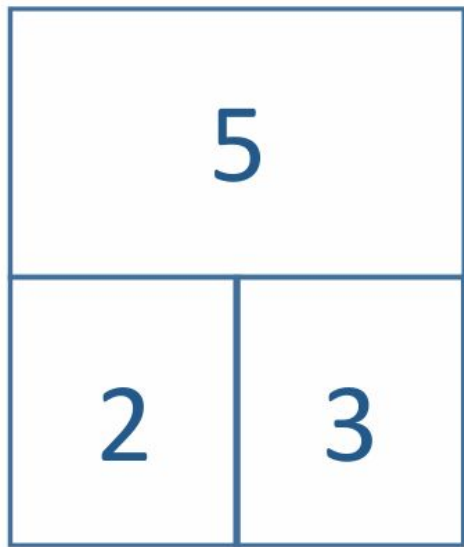
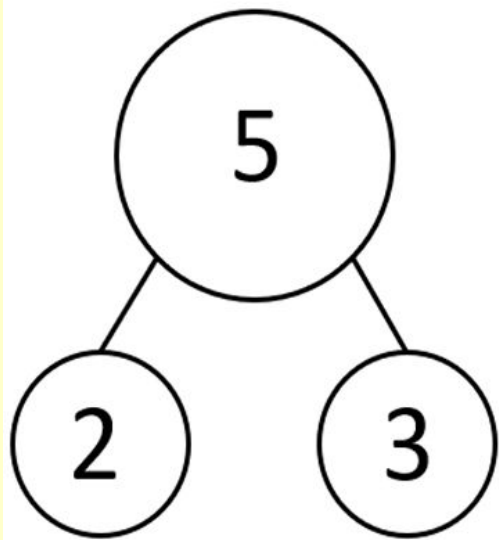
whole 5

part 2

part 3

2 and 3 make 5.

This is a number bond.



$$2 + 3 = 5$$

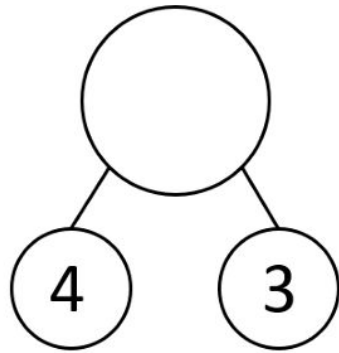
$$3 + 2 = 5$$

$$5 - 2 = 3$$

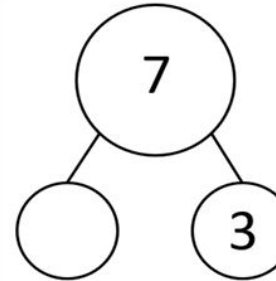
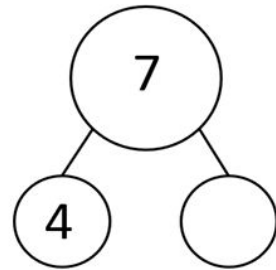
$$5 - 3 = 2$$

The part-whole model can be used to show the different relationships.

The additive relationship concerns more than 2 numbers.
When some are known, others can be found



Missing
whole

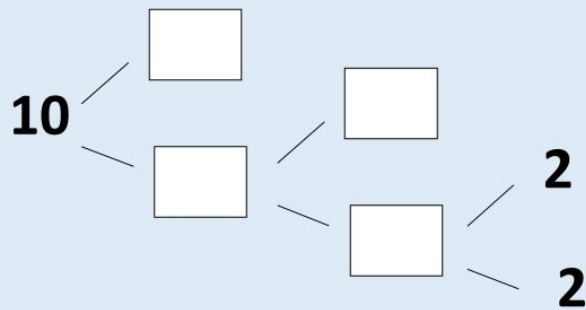
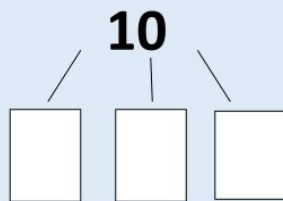
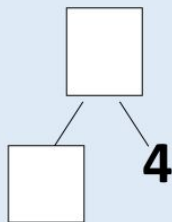
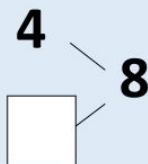
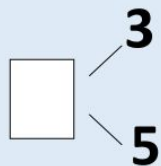
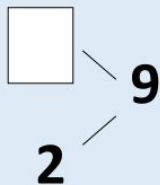
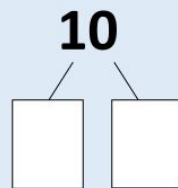
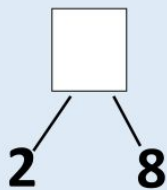
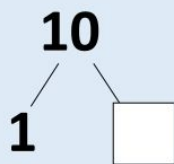
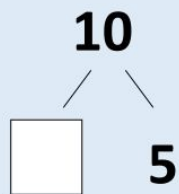


Missing
part

$$7 = 4 + \underline{\quad}$$

$$4 + \underline{\quad} = 7$$

$$7 - \underline{\quad} = 4$$

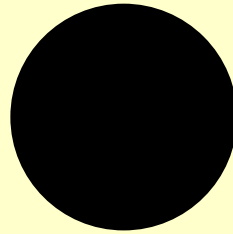
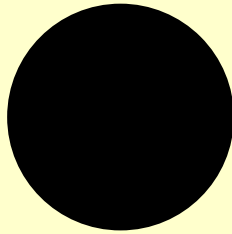
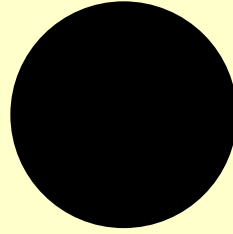
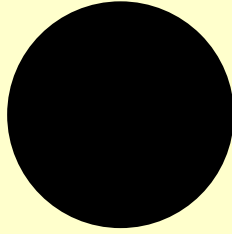


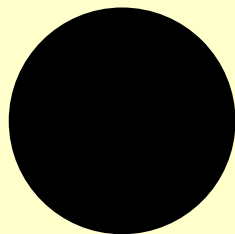
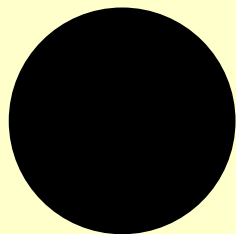
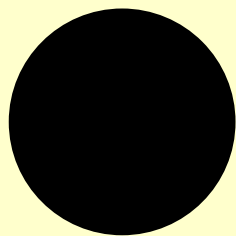
A pupil has mastered / understood if he or she can:

- Describe it in his or her own words
- Represent it in a variety of ways
- Explain it to someone else
- Make up his or her own examples (and non examples) of it
- See connections between it and other facts or ideas
- Recognise it in new situations and contexts
- Make use of it in various ways, including in a new situation

An opportunity to practise :)

Subitise!





Go and see...

Doubles



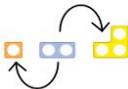






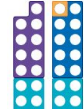






Add 9

Near Doubles
then...

Make 10 and

3. How you can help at home.

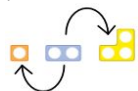
BPA Calculation Strategies: generalisations

1) Subitise 	Know the value just by looking at the shape.	9) Adding and subtracting 10 	Find ten more and ten less/fewer by adding and subtracting 10. When we add ten or subtract ten, the ones digit stays the same.
2) 1 more and 1 less 	When we add one, we get the next counting number. When we subtract one, we get the previous counting number (e.g. $3 + 1 = 4$, $4 - 1 = 3$)	10) Adding and subtracting 9 	If we add 10 to a number and subtract 1, it is the same as adding 9. If we know $8 + 10 = 18$, $8 + 9$ is 17. If we subtract one from the addend, we subtract one from the total.
3) 2 more and 2 less 	If we add two to a number, we go from odd to next odd, or even to next even. If we subtract two to a number, we go from odd to previous odd, or even to previous even.	11) Addition and subtraction facts of 11 	If I know that $8 + 2 = 10$, then $8 + 3 = 11$. If I know that $10 - 2 = 8$ then $11 - 3 = 8$.
4) Doubles 	Memorise doubles of numbers to 10 using a visual approach. When we add two numbers that are the same size we call it a double fact.	12) Make 10 and then... 	Additions which cross the 10 boundary can be calculated by 'Making Ten' first, to complete the decade, then adding on the remaining amount. E.g. $8 + 6$ can be calculated by thinking ' $8 + 2 = 10$ and 4 more makes 14'. The same strategy can be applied to subtractions through 10.
5) Near double 	We can use our double facts to calculate near doubles. If we know $4 + 4 = 8$, then $4 + 5 = 9$ (one more), and $4 + 3 = 7$ (one less). If we add one to an addend, the total increases by 1.	13) Adjust it 	Any addition and subtraction can be calculated by adjusting from a fact you know already, e.g. $6 + 9$ is one less than $6 + 10$.
6) 0 strategy 	When we add 0 to or subtract 0 from another number, the total remains the same. If we subtract a number from itself, the difference is 0.	14) Swap it 	When the order of two numbers being added (addends) is exchanged, the sum remains the same. E.g. $1 + 8 = 8 + 1$. Sometimes reversing the order of the two addends makes addition easier.
7) Adding and subtracting to 10 	Go beyond just recalling the pairs of numbers that add to make 10. Make sure that we can spot addition and subtraction calculations which we can use the number bonds to 10 to solve.	15) Spot the difference 	Adjacent odds and evens have a difference of 2. Difference is written as subtraction.
8) All addition and subtraction facts within 10 	Focus especially on 6, 7, 8, 9. Review previously learnt facts	16) Constant difference 	$6 - 2 = 4$. $5 - 1 = 4$ If you subtract one from the minuend and the subtrahend, the difference stays the same.

Notes on vocabulary:

Addition: ___ is equal to ___ plus ___ plus ___ is equal to ___ .
 The parts are called the 'ADDEND' and the whole is called the 'SUM'.
 Subtraction: ___ minus ___ is equal to ___ .
 The whole is called the 'MINUEND'; the part being subtracted is called the 'SUBTRAHEND'; the other part is the 'DIFFERENCE' between the whole and the part subtracted.

2) 1 more and 1 less



Addition: ___ is equal to ___ plus 1; ___ plus 1 is equal to ___ .
 Subtraction: ___ minus 1 is equal to ___ .
 1 less than ___ is ___ ; 1 more than ___ is ___ .

3) 2



Addition: ___ is equal to ___ plus 2; ___ plus 2 is equal to ___ .
 Subtraction: ___ minus 2 is equal to ___ .
 2 less than ___ is ___ ; 2 more than ___ is ___ .

4) Doubles



Double ___ is ___ ; half of ___ is ___ .

5) Near double



Double ___ is ___ ; add 1 is ___
 Double ___ is ___ ; subtract 1 is ___

6) 0 strategy

Addition: ___ is equal to ___ plus 0; ___ plus 0 is equal to ___ .
 Subtraction: ___ minus 0 is equal to ___ .

7) Adding and subtracting 10



___ needs ___ to make 10
 I have ___, you have ___ ;
 together we have 10!
 10 is equal to ___ plus ___ .
 ___ counters is ___ fewer than 10 counters.

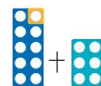
8) All addition and subtraction facts within 10

9) Adding and subtracting 10



Addition: ___ is equal to ___ plus 10; ___ plus 10 is equal to ___ .
 Subtraction: ___ minus 10 is equal to ___ .
 10 less than ___ is ___ ; 10 more than ___ is ___ .

10) Adding and subtracting 9



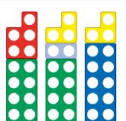
Addition: To add 9, first I add 10. ___ plus 10 is equal to ___ . Then I subtract 1. ___ minus 1 is equal to ___ .
 Subtraction: To subtract 9, first I subtract 10. ___ minus 10 is ___ . Then I add 1 back on. ___ plus 1 is equal to ___ .

11) Addition and subtraction facts of 11



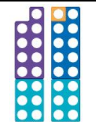
10 needs ___ to make ___ ; ___ is made of 10 and ___ .

12) Make 10 and then...



Addition: First, I split the ___ ; ___ can split into ___ and ___ . Then ___ plus ___ is equal to 10... and 10 plus ___ is equal to ___ .
 Subtraction: First, I split the ___ ; ___ can split into ___ and ___ . ___ subtract ___ to reach 10; 10 subtract ___ is ___ .

13) Adjust it



Addition: I know that ___ plus ___ is equal to ___ , so I know ___ plus ___ is equal to ___ .
 Subtraction: I know that ___ minus ___ is equal to ___ , so I know ___ minus ___ is equal to ___ .

14) Swap it



Addition: ___ plus ___ is the same as ___ plus ___
 Subtraction: ___ minus ___ is not the same as ___ minus ___ .

15) Spot the difference



The difference between ___ and ___ is ___ .

16) Constant difference



___ minus ___ is the same as ___ minus ___ .

numicon
at home



[Numicon guide for parents - Oxford Owl for Home](#)

1. Flashcards

Don't underestimate the need for repetition! It is amazing how many times a child needs to repeat number bonds before they are consolidated.

Flashcards are a great way of having fun while learning. Chop up the facts and practise them in groups.

Try taking them with you when you are out and about – spending a quick 5 minutes here and there can be fun and can make all the difference. Why not use the stopwatch on your phone for an element of challenge? Can they tell you the double addition facts to 20 in one minute?

2. Number bond targets

Try this fun game to add, subtract or multiply to reach a target. Give your child a target of 10 and then shout out any one-digit number (including 0) and they have to add one other number to reach 10.

You can then vary this by making the target 0 and you shout out any one-digit number that they have to take away from 10 to reach 0. Once they know these bonds off by heart, try working with a target of 20.

Change the target for adding and subtracting to make it more complex!

3. Double and halve

This is a great game for waiting rooms, in the car – whenever you have a minute to spend. Say an even number and ask your child to double the number and then halve the number. Begin with a single-digit number, then up to 20 and then a multiple of 10.

Apps and Games

[Hit the Button - Quick fire maths practise for 6-11 year olds](#)



[Fun maths games and activities - Oxford Owl for Home](#)

Fun maths activities

You and your little ones can have loads of fun with maths! There are loads of activity sheets and videos to explore on this page. You can browse by age.

You'll also find heaps of [activity books](#) to further develop maths skills in our [bookshop](#).

Browse by age:

3-4

4-5

5-6

6-7

7-9

9-11



Maths activity sheets

Print out and fill in our selection of free maths activity sheets.



Maths videos

Find maths ideas explained and top tips for practising maths skills on our YouTube channel.

[Adding and subtracting - KS1 Maths - BBC Bitesize](#)

Numberblocks

[Numberblocks - BBC iPlayer](#)



Thank you for listening 😊

