



Tillington Manor

PRIMARY SCHOOL

Working TOGETHER to achieve the best!

Numicon

Calculation

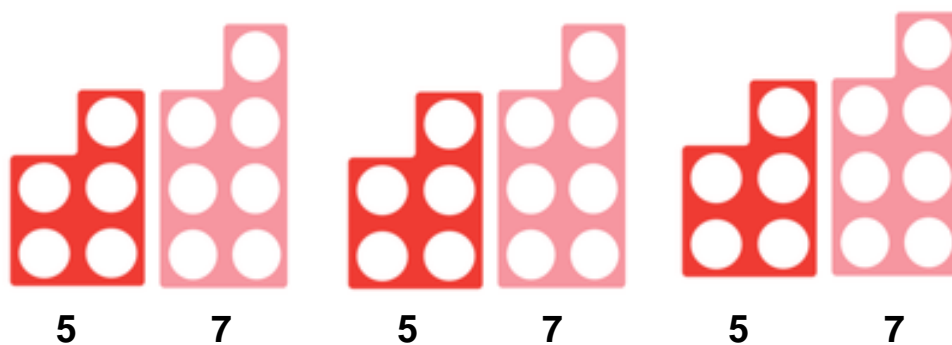
Policy

Patterns

Building patterns with Numicon shapes

Aims:

- To develop ability to sequence
- To copy, continue and devise repeating patterns
- To introduce pattern-making using Numicon shapes
- To assign numerals and number names to Numicon shape patterns



One more

Aims:

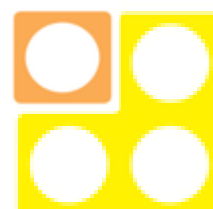
- To understand the pattern of 1 more
- To record the pattern of 1 more as addition



$$1 + 1 = 2$$



$$2 + 1 = 3$$



$$3 + 1 = 4$$

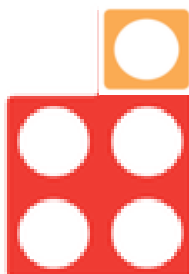
One less

Aims:

- To understand the pattern of 1 less
- To record the pattern of 1 less as subtraction



$$4 - 1 = 3$$



$$5 - 1 = 4$$

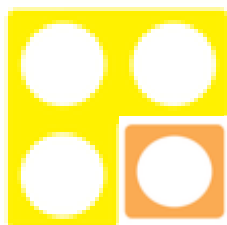


$$6 - 1 = 5$$

Ordering addition facts

Aims:

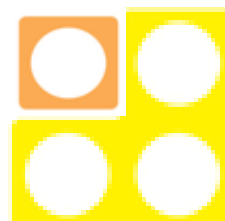
- To build, order and record all combinations of addition for all numbers up to 10
- To begin to use pattern to check that all combinations for a number have been made



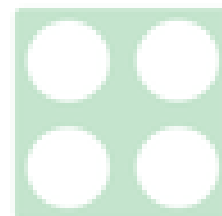
$$1 + 3 = 4$$



$$2 + 2 = 4$$



$$3 + 1 = 4$$

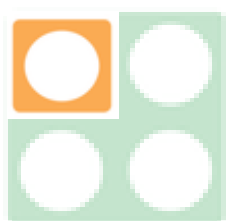


$$4 + 0 = 4$$

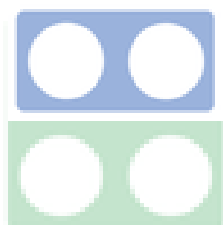
Ordering subtraction facts

Aims:

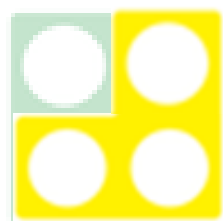
- To build, order and record all subtraction facts of all numbers to 10
- To begin to use pattern to check that all subtractions for a number have been made



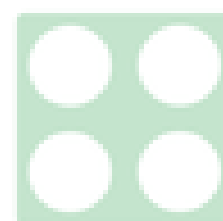
$$4 - 1 = 3$$



$$4 - 2 = 2$$



$$4 - 3 = 1$$



$$4 - 4 = 0$$

Odd and even

Aims:

- To understand odd and even numbers



2



4



6



8



10



1



3



5



7



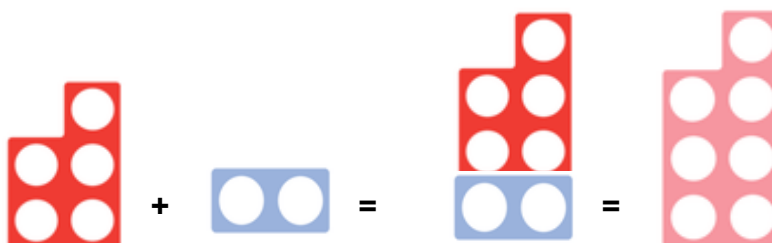
9

Addition

Adding one-digit numbers when the answer doesn't go over 10

Aims:

- To add one-digit numbers

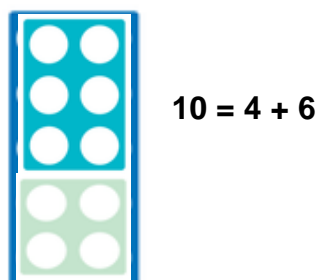


$$5 + 2 = 7$$

Adding one-digit number to make 10

Aims:

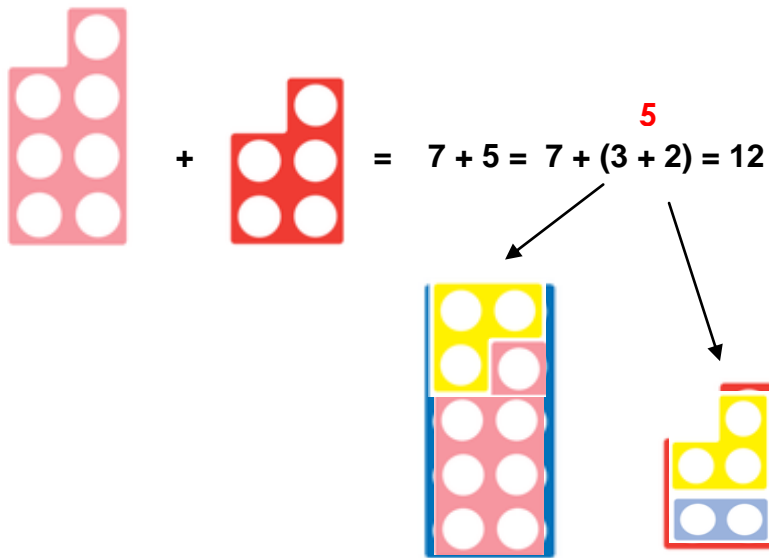
- To make 10 with different one-digit numbers



Adding one-digit numbers when the answer goes over 10

Aims:

- To add one-digit number when the answer is two-digit number
- To add to 10 then to add the rest



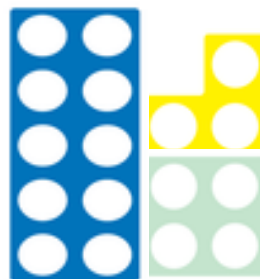
Using known addition facts to solve new problems

Aims:

- To generalise basic addition facts in patterns of similar calculations



$$4 + 3 = 7$$



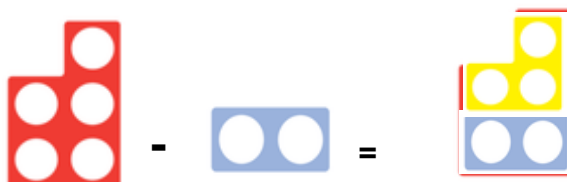
$$14 + 3 = 17$$

Subtraction

Subtracting one-digit numbers

Aims:

- To subtract one-digit numbers

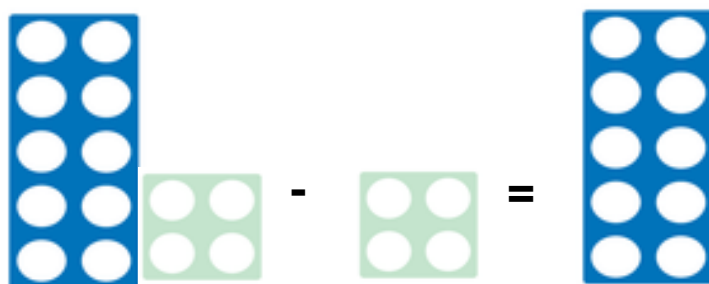


$$5 - 2 = 3$$

Subtracting two and one-digit number to make 10

Aims:

- To make 10 when subtracting two and one-digit numbers

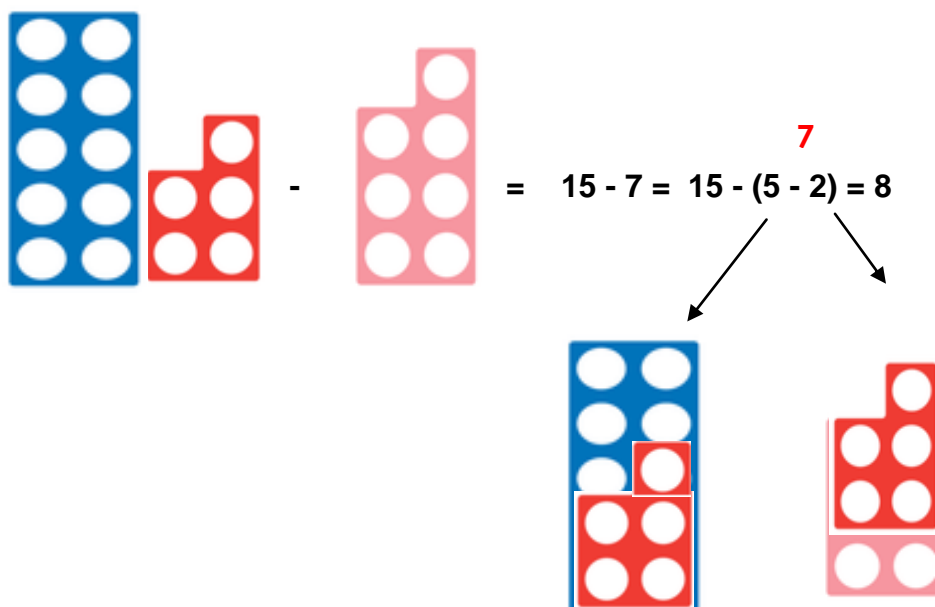


$$14 - 4 = 10$$

Subtracting two and one-digit numbers when the answer goes over 10

Aims:

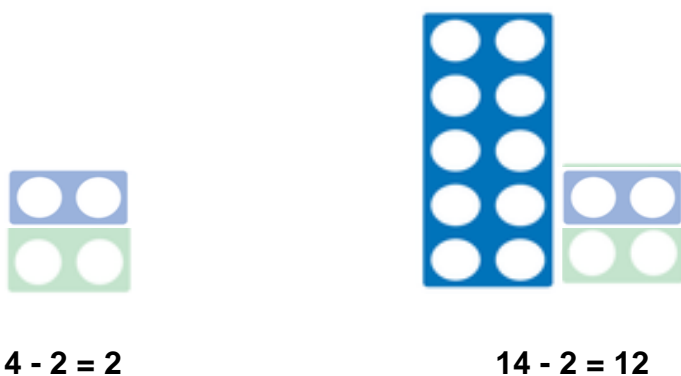
- To subtract two and one-digit numbers when the answer is one-digit number
- To subtract to 10 then to subtract the rest



Using known subtraction facts to solve new problems

Aims:

- To generalise basic addition facts in patterns of similar calculations





Place Value

Partitioning numbers from 1 to 20

Aims:

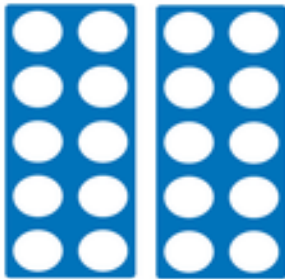
- To understand the structure of numbers from 1 to 20 and place value
- To learn to partition two digit numbers into tens and units

Number	Tens	Ones
12		

Tens and units – zero as a place holder

Aims:

- To learn the components of tens and units

Number	Tens	Ones
20		0