

Use known facts

What's the same and what's different?

$$\begin{aligned} 6 + 4 &= \\ 60 + 40 &= \\ 600 + 400 &= \end{aligned}$$

Known facts and place value

$$282 + 7$$

I know that $2 + 7 = 9$

So, $282 + 7 = 289$

Adjust

$$234 + 99$$

add 100 then subtract 1

$$367 - 39$$

subtract 40 then add 1

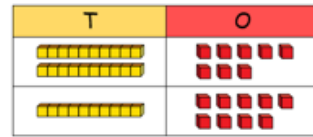
Estimate

141 + 58 is approximately
140 + 60

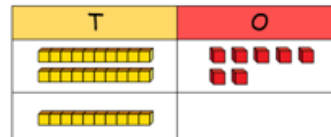
Representations to support addition

We can use equipment to find the total of 2 numbers. This supports the conceptual understanding before moving to formal methods.

$$28 + 19$$



3 tens 17 ones



Exchange 10 ones for 1 ten

$$28 + 19 = 42$$

T	O
2	8
+ 1	9
4	7
1	

Fluency

Add three numbers to total 247

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = 247$$

Now find a different three numbers

Year 3

Addition and Subtraction

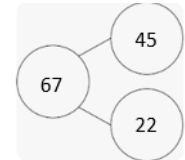
Money Problems

Shivam buys 2 pencils that cost 29p each. How much change will he get from £1?

Understand the inverse

relationship between addition and subtraction.

67	
45	22



$$45 + 22 = 67 \quad 22 + 45 = 67$$

$$67 = 45 + \square \quad \square = 22 + 45$$

$$\square = 67 - 45 \quad 45 = 67 - 22$$

$$67 - 22 = 45 \quad 67 - \square = 22$$

Carl says 'If I add two numbers together I can check my answer by taking them away afterwards. So to check $123 + 14$, I can do $14 - 123$. 'Is he right? Explain your answer.

Know pairs of numbers that total 100 and derived subtraction facts

$$100 = 74 + \square \quad 43 + \square = 100$$

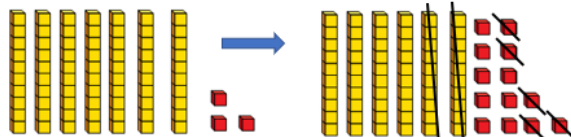
$$100 - \square = 26 \quad 100 - \square = 57$$

Representations to support subtraction

We can use equipment to find the difference between 2 numbers.

This supports the conceptual understanding before moving to formal methods.

$$73 - 25$$



7 tens and 3 ones

6 tens and 13 ones

$$13 \text{ ones} - 5 \text{ ones} = 8 \text{ ones}$$

$$6 \text{ tens} - 2 \text{ tens} = 4 \text{ tens}$$

$$4 \text{ tens and } 8 \text{ ones} = 48$$

T	O
6	13
7	2
4	8

Use the correct vocabulary

plus, add, total, increase, amount, sum, addition, minus, subtract, take away, less, difference, decrease, partition, round, calculate, inverse, operation, exchange

Problems with more than one solution

3 monkeys ate 22 bananas. Each of them ate a different number. How many bananas did they each eat? Find as many solutions as you can.

Investigate - True or False?

2 odd numbers add up to make an even number.

3 odd numbers add up to make an even number.

Investigate

How many different rectangles can you draw with a perimeter of 20cm?