

### Use known facts

What's the same and what's different?

- $6 + 4 =$
- $60 + 40 =$
- $66 + 4 =$
- $666 + 4 =$
- $600 + 400 =$

### 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

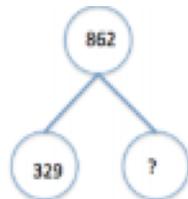
### Estimate

$141 + 58$  is approximately  
 $140 + 60$

### Representations to support addition and subtraction

These structures show the relationship between addition and subtraction.

#### Part-Part Whole Model



#### Bar Model



#### Number Lines

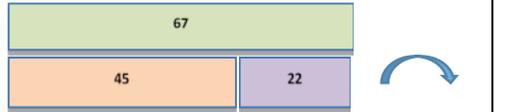
- $564 - 213 =$
  - $563 - 212 =$
  - $562 - 211 =$
  - $554 - 203 =$
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**Fluency**  
Add three numbers to total 247  
 $\_\_ + \_\_ + \_\_ = 247$   
Now find a different three numbers

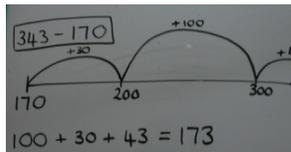
## Year 3 Addition and Subtraction

**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.



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



Subtraction as 'difference'

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.

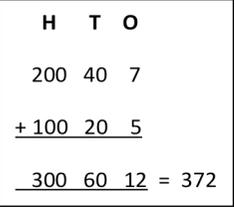
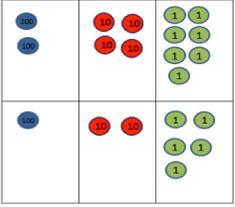
### Know pairs of numbers that total 100 and derived subtraction facts

**Use the correct vocabulary**  
plus, add, total, increase, amount, sum, addition, minus, subtract, take away, less, difference, calculate

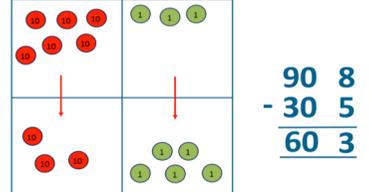
**Investigate - True or False?**  
2 odd numbers add up to make an even number.  
3 odd numbers add up to make an even number.

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

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



leading to



Equipment can also support subtraction.