
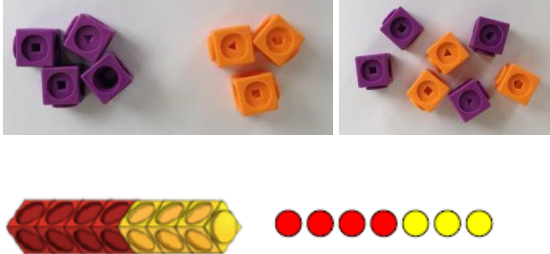
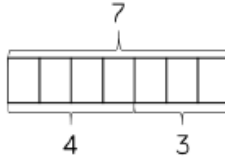
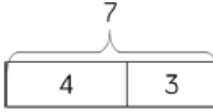
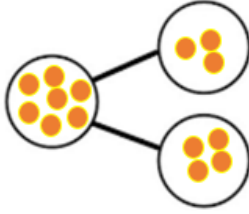
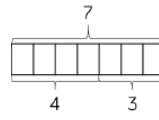
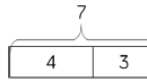
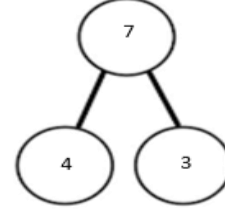
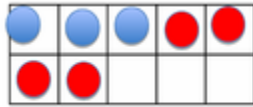




Abbey C of E Infant School Calculation Policy

Addition - *Key language which should be used: sum, total, parts and wholes, plus, add, altogether, more than, 'is equal to' 'is the same as'*

	Concrete	Pictorial	Abstract
<p>Children begin to add/count on mentally using number rhymes and begin to record in the context of play or practical activities Adding stories and role play, encouraging use of language for addition.</p>	 <p>9 and 1 more is 10 9 add 1 equals 10 $9 + 1 = 10$</p>		
<p>Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears etc)</p> <p>$4 + 3 =$</p>	  	  	 <p>$4 + 3 = 7$</p>



$3 + 4 =$

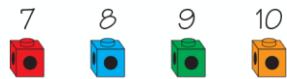
Counting on using cubes

Children should understand that to count on from the greater number is more efficient

How many tomatoes are there altogether?



3 and 2 make 5.



$3 + 2 =$



$6 + 4 =$



$3 + 2 =$

$6 + 4 =$

Counting on using a number line

Number lines can be used to find 1 more and counting on to find a total.



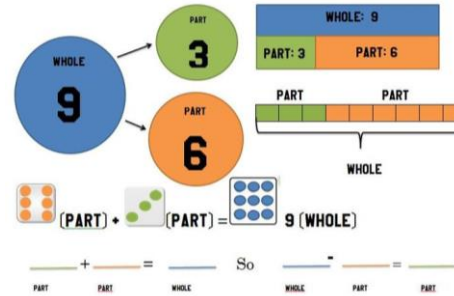
$4 + 3 =$

$4 + 3 =$

Part—Whole Method

Teach addition and subtraction alongside each other as children will use this model to see the inverse relationship

$6 + 3 = 9$



$6 + 3 = 9$

$9 = 6 + 3$

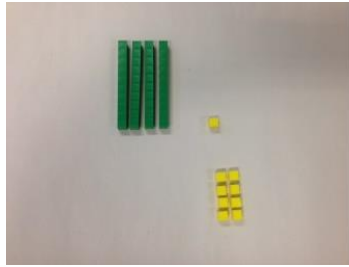
$9 - 6 = 3$

$9 - 3 = 6$

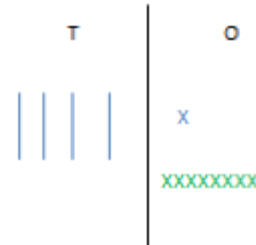
2-digit + 1-digit using Base 10.

Continue to develop understanding of partitioning and place value 41 + 8.

Use place value grids to support partitioning.



Children to represent the concrete using a particular symbol e.g. lines for tens and dot/crosses for ones.

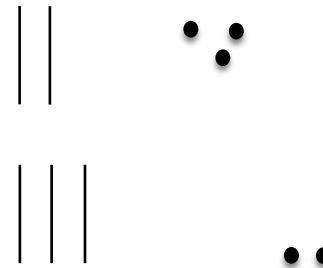
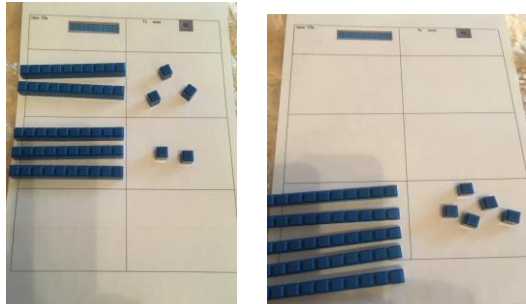


	4	1
+		8
<hr/>		
	4	9

Partitioning to add two 2-digit numbers (no regrouping)
23 + 32 =

Place Value grids and Base 10 should be used to support this

23 + 32 =



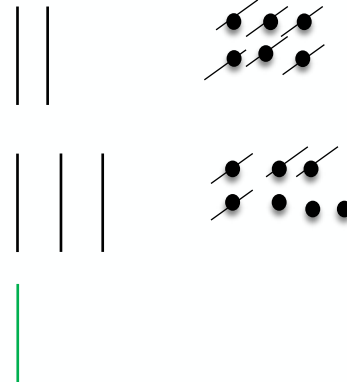
?	
23	32

20 + 30 = 3 + 2 =

2	3	
3	2	+
<hr/>		
5	5	

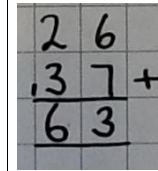
Partitioning to add two 2-digit numbers (regrouping required)

$26 + 37 =$



?	
26	37

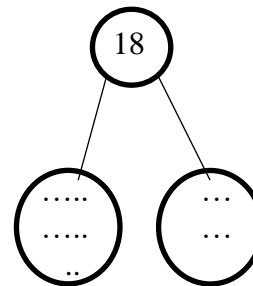
$20 + 30 = 6 + 7 =$



Always use missing digit problems at all stages of learning

$12 + ? = 18$

Children get the 18 cubes which represent the whole. They can break off the given number, 12. They know what is left is the other part and therefore the answer.



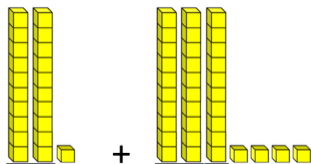
$12 + ? = 18$

$18 - 12 = ?$

18	
12	?

Fluency variation, different ways to ask children to solve 21+34

Sam saved £21 one week and £34 another. How much did he save in total?



$21+34=55$. Prove it! (reasoning but the children need to be fluent in representing this)

What's the sum of twenty one and thirty four?



21

+34

21 + 34 =

= 21 + 34