

ADDITION STAGE 1

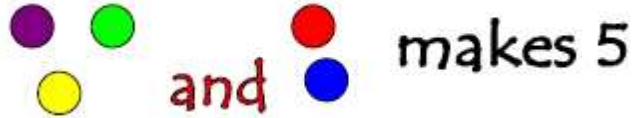
Progression

Relate addition to combining two groups of objects

(Represent using pictures, objects or symbols)

Adding by counting on

Active Learning Through Models and Images:



$$3 + 2 = 5$$

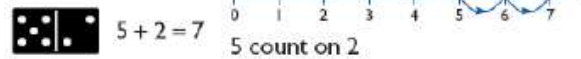
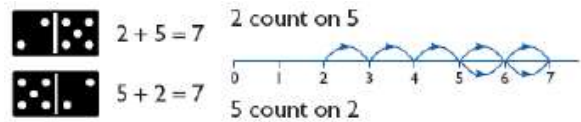
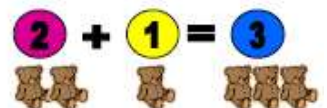
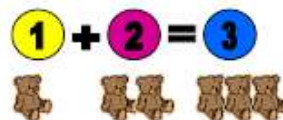


Underlying skills

- Recognise numbers 0 to 10
- Count reliably up to 10 everyday objects
- Finding one more than a number
- Find pairs of numbers that add to ten (number bonds)
- Understand addition can be done in any order

Active Learning Through Models and Images:

0 1 2 3 4 5 6 7 8 9 10



ADDITION STAGE 2

Progression

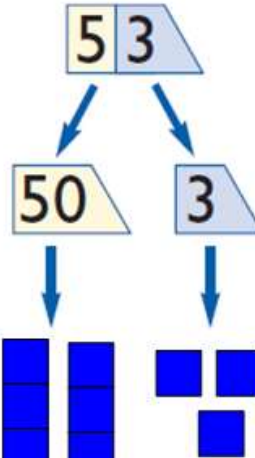
Count in ones and tens

Begin to partition numbers in order to add
(Represent using pictures, objects or symbols)

Active Learning Through Models and Images:



$$\begin{aligned} 10 + 10 + 4 \\ = 20 + 4 \\ = 24 \text{ balloons} \end{aligned}$$



Underlying skills

- Find 10 more than a number
- Understand which digit changes and how place value is affected when adding ones or tens to a number
- Partitioning and recombining
- Number bonds to 10
- Addition facts for all numbers up to 10
- e.g. $4 + 3 = 7$, $5 + 2 = 7$, $6 + 3 = 9$ etc.
- Understanding that addition can be done in any order

Active Learning Through Models and Images:

ADDITION STAGE 3

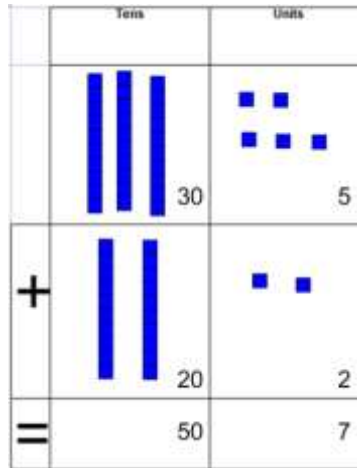
Progression

Use partitioning to calculate TU + TU where numbers do not bridge through ten

(Represent using pictures, objects or symbols)

Use partitioning to calculate TU + TU where numbers bridge through ten
(Represent using pictures, objects or symbols)

Active Learning Through Models and Images:



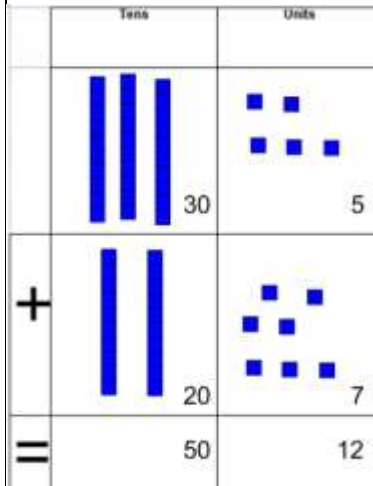
$35 + 22 = 57$

$35 + 27 = 62$

$50 + 12 =$

$50 + 10 + 2 = 62$

(may need jottings of Dienes to represent this)



Underlying skills

- Mental recall of number bonds
- Use near doubles
- Understand that numbers can be partitioned in different ways
- Being able to add multiples of 10
- Instant recall of addition facts for numbers up to 10
- Being able to add teen numbers to multiples of 10 mentally

Active Learning Through Models and Images:

- $6 + 4 = 10$
- $? + 3 = 10$
- $25 + 75 = 100$
- $19 + ? = 20$
- $6 + 7 = \text{double } 6 + 1 = 13$
- $52 = 50 + 2$
- $52 = 40 + 12$
- $52 = 30 + 22$



ADDITION STAGE 4

Progression

Using partitioning to calculate HTU + HTU
(Represent using pictures, objects or symbols)

Using partitioning to calculate decimals and money
(Represent using pictures, objects or symbols)

Expanded method

$$235 + 127 =$$

$$200 + 100 = 300$$

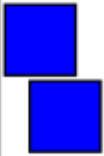



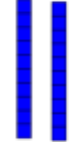

$$30 + 20 = 50$$

$$5 + 7 = 12$$

$$300 + 50 + 12 = 362$$

Active Learning Through Models and Images:

$$235 + 127 = 362$$

	Hundreds	Tens	Units
			
+			
=	300	50	12

	Hundreds	Tens	Units
			
	£2	30p	5p
+			
	£1	20p	7p
=	£3	50p	12p = £3.62

Underlying skills

- Partition money into pounds and pence
- Understand £1.00 is the same as 100p
- Know that the hundreds, tens, units and decimal points (hundredths and tenths) should line up appropriately underneath each other
- Being able to add multiples of 10
- Count on in decimals to nearest whole number
- Addition by counting on from the largest number and using number facts
 - $7 + 4 = 11$
 - $70 + 40 = 110$

Active Learning Through Models and Images:

$$£3.61 = £3 + 60p + 1p$$



70



