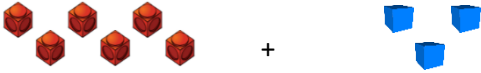
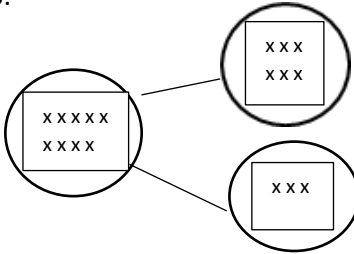
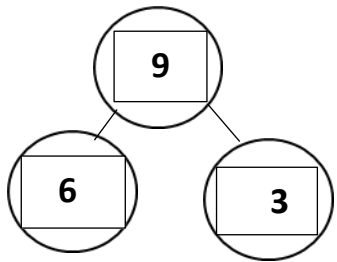

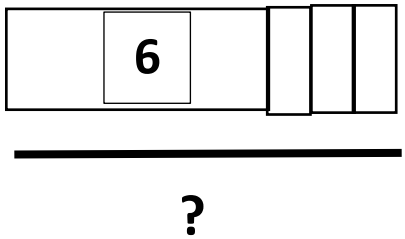

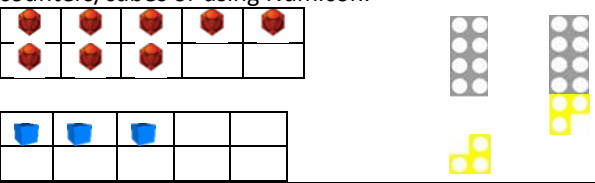
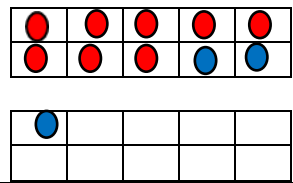
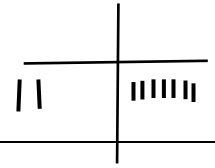
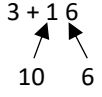




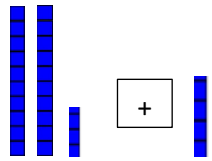
Addition

Key Vocabulary: add, more, and make, sum, total altogether, double, near double, half, halve, one more, two more ... ten more, how many more to make ...? how many more is ... than ...? how much more is ...?, addend.

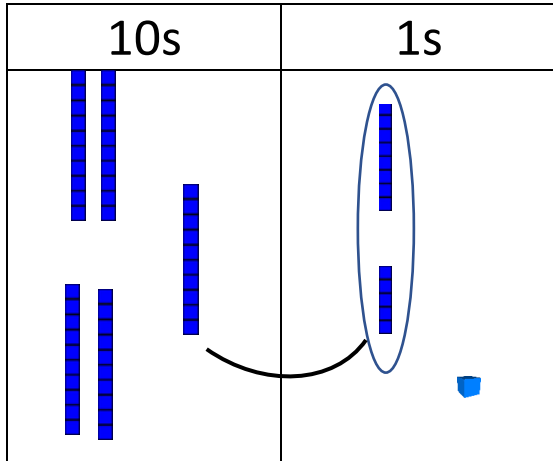
<i>CONCRETE</i>	<i>PICTORIAL</i>	<i>ABSTRACT</i>
<p>Combining two parts to make a whole (use other resources too e.g. eggs, shells, teddy bears, cars) $6 + 3$</p> 	<p>Children represent the cubes using dots or crosses. They could put each part on a part whole model too.</p> 	<p>6 is a part, 3 is a part and the whole is 9.</p> 
<p>Counting on using number lines, cubes or Numicon</p> 	<p>A bar model which encourages the children to count on, rather than count all.</p> 	<p>The abstract number line: What is 3 more than 6? What is the sum of 3 and 6? What is the total of 3 and 6?</p> 
<p>Regrouping to make 10; using ten frames and counters/cubes or using Numicon.</p> 	<p>Children draw the ten frame and counters.</p> 	<p>Adding by partitioning.</p> $8 + 3 = 11$ $3 + 8 = 8 + \square$ $3 + 8 = \square + 2$ $11 = 3 + 8$
<p>TO+ 0 using base 10. Continue to develop understanding of partitioning and place value.</p>	<p>Children represent the base 10 e.g. lines for tens and dot/crosses for ones.</p> 	<p>Adding by partitioning.</p> $53 + 16$  <p>Add the tens to the first number then add the ones.</p> $53 + 10 = 63$



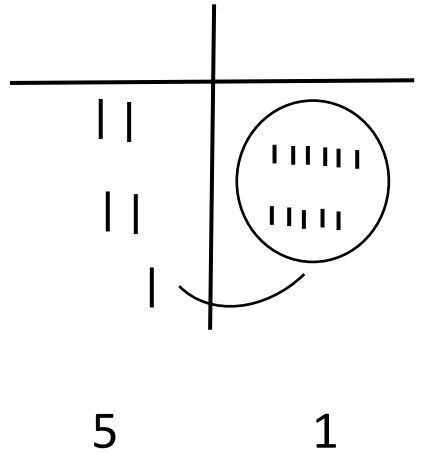
$23 + 4 =$



TO + TO using Base 10. Continue to develop understanding of place value and partitioning. Introduce concept of exchanging 10 ones for 1 ten. $26 + 25$



Represent base 10 in a place value chart.



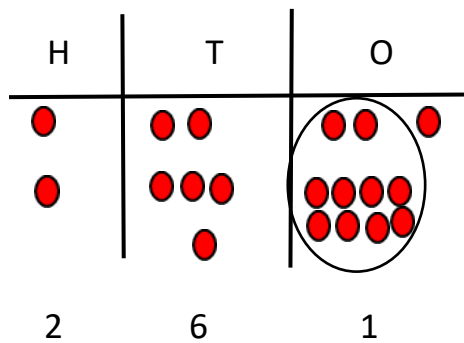
$63 + 6 = 69$

Looking for ways to make 10.

$$\begin{array}{r}
 26 + 25 = \\
 \swarrow \quad \searrow \\
 5 + 1
 \end{array}
 \quad
 \begin{array}{l}
 20 + 20 = 40 \\
 5 + 5 = 10 \\
 40 + 10 + 1 = 51
 \end{array}$$

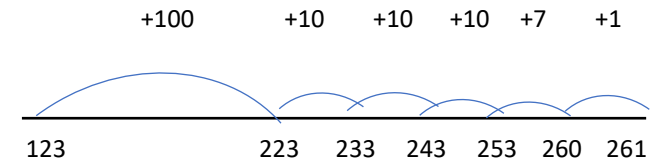
Adding HTO using a place value chart.

$123 + 138$



Number line to add H T O.

$123 + 138$





Use of place value counters to add HTO + TO, HTO + HTO etc. When there are 10 ones in the 1s column - we exchange for 1 ten, when there are 10 tens in the 10s column we exchange for 1 hundred.

100	10	1
●●	●●●	●●●●
●●	●●●●	●●
4	7	5

Represent the counters in a place value chart, circling when they make an exchange

- value 100	10	1
○	○○	○○○○
○○	○○○	○○○○
3	6	1

(Note: In the original image, a blue circle highlights 10 ones in the '1' column, and an arrow points from this circle to the '10' column, indicating an exchange.)

Expanded Method

$$\begin{array}{r}
 473 \\
 + 248 \\
 \hline
 11 \\
 110 \\
 \hline
 600 \\
 721
 \end{array}$$

Column Method

$$\begin{array}{r}
 473 \\
 + 248 \\
 \hline
 721
 \end{array}$$

Adding Decimal

$$\begin{array}{r}
 47.3 \\
 + 24.8 \\
 \hline
 72.1
 \end{array}$$