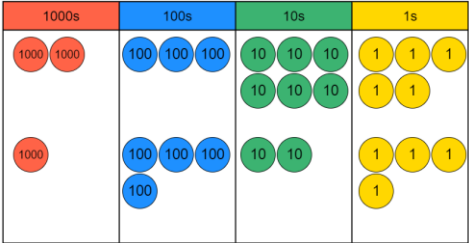
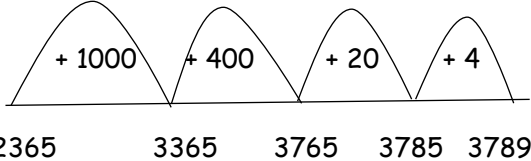
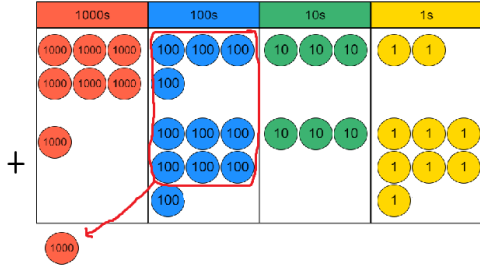
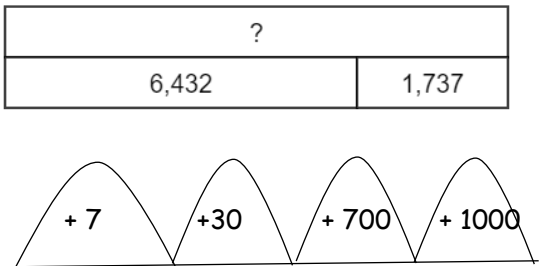


YEAR 4		Addition							
Vocabulary: thousands, hundreds, tens, ones, estimate, partition, recombine, increase, near multiple of 10 and 100, inverse, rounding, column addition, exchange, addend + addend = sum/total (See previous year groups)									
Concrete		Pictorial	Abstract						
Add whole numbers with up to 4 digits. No exchanging: 2365 + 1424 = 3789		Add whole numbers with up to 4 digits. No exchanging: 2365 + 1424 = 3789	Written Add whole numbers with up to 4 digits. No exchanging:						
			$\begin{array}{r} 2365 \\ + 1424 \\ \hline 3789 \end{array}$						
Exchanging: 6,432 + 1,737 = 8169		Exchanging: 6432 + 1737 = 8169	Exchanging:						
			<table><tr><th>Expanded</th><th></th><th>Compact</th></tr><tr><td>$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 9 \\ 60 \\ 1 \ 100 \\ 7 \ 000 \\ \hline 8 \ 169 \end{array}$</td><td>→</td><td>$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 8 \ 169 \\ \hline 1 \end{array}$</td></tr></table>	Expanded		Compact	$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 9 \\ 60 \\ 1 \ 100 \\ 7 \ 000 \\ \hline 8 \ 169 \end{array}$	→	$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 8 \ 169 \\ \hline 1 \end{array}$
Expanded		Compact							
$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 9 \\ 60 \\ 1 \ 100 \\ 7 \ 000 \\ \hline 8 \ 169 \end{array}$	→	$\begin{array}{r} \text{Th H T O} \\ 6 \ 432 \\ + 1 \ 737 \\ \hline 8 \ 169 \\ \hline 1 \end{array}$							

Add decimals up to 2 decimal places (as money or measures):

$$£15.54 + £26.25 = £41.79$$

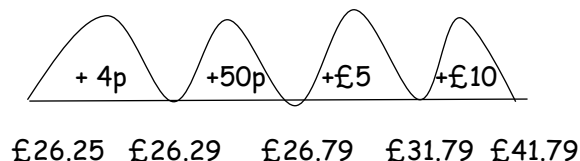
T	O	th	hth
			
			

Use place value counters or money depending on the context.

Start with no exchanging leading to exchanging.

Add decimals up to 2 decimal places (as money or measures):

$$£15.54 + £26.25 = £41.79$$



Add decimals up to 2 decimal places (as money or measures):

Expanded	Compact
$ \begin{array}{r} £26.25 \\ + £15.54 \\ \hline 0.09 \\ 0.70 \\ 11.00 \\ \underline{30.00} \\ £41.79 \end{array} $	$ \begin{array}{r} £26.25 \\ + £15.54 \\ \hline £41.79 \\ 1 \end{array} $

Mental Methods:

Counting on:

$$2534 + 2150$$

$$2534 + 2000 + 100 + 50 = 4684$$

Using known facts and place value:

$$5060 + 47$$

$$60 + 47 = 107 \text{ so } 5060 + 47 = 5107$$

$$0.6 + 0.2$$

$$\text{If } 6 + 2 = 8 \text{ then } 0.6 + 0.2 = 0.8$$

Redistribution:

$$2504 + 3234 \text{ redistribute to } 2500 + 3238.$$

Adjusting:

Demo on a number line first.

$$2345 + 499 \text{ (add 500 and subtract 1)}$$

$$2345 + 2999 \text{ (add 3000 and subtract 1)}$$

Partitioning:

$$2314 + 1242$$

$$2000 + 1000 = 3000$$

$$300 + 200 = 500$$

$$10 + 40 = 50$$

$$4 + 2 = 6$$

$$3000 + 500 + 50 + 6 = 3556$$