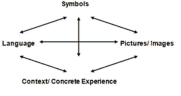


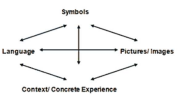
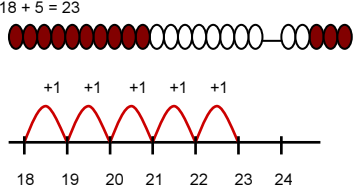
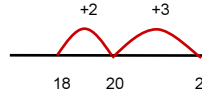
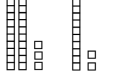
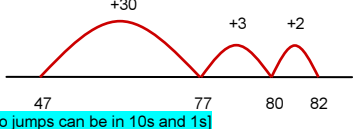
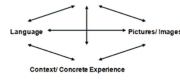
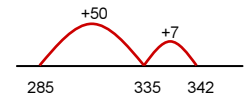
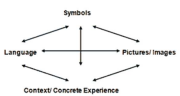
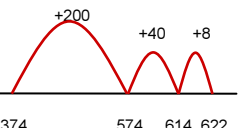
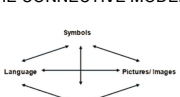
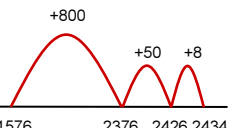
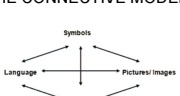
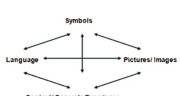


<p>YR</p>	<p>Addition as 'combining 2 groups'</p>	<p>MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>REAL EXPERIENCES Pictures / Objects</p> <p>I eat 2 cakes and my friend eats 3. How many cakes did we eat altogether?</p> <p>Might be recorded as: $2 + 3 = 5$</p> 	<p>Symbols</p> <p>8 people are on the bus. 5 more get on at the next stop. How many people are on the bus now?</p>  <p>[Might be recorded as: $8 + 5 = 13$]</p>	<p>1 more (nos up to 10)</p>	<p>(see recording)</p>	
<p>Y1</p>	<p>Addition as 'counting on'</p> <p>U + U (bridging 10) TU + U (bridging 20)</p>	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Pictures / Symbols</p> <p>(see above)</p> <p>Number track / Number line – jumps of 1 (modelled using bead strings)</p> <p>$18 + 5 = 23$</p> 	<p>Number line (efficient jumps)</p> <p>$18 + 5$</p> 	<p>No number line</p> <p>$18 + 5$</p> <p>$18 + 2 = 20$ $20 + 3 = 23$</p>	<p>Pairs to 10 Bonds to 10 Facts up to 5 1 / 10 more than a number</p>	<p>U + multiple of 10 TU + multiple of 10 +9 (by +10, -1)</p>
<p>Y2</p>	<p>TU + TU (bridging 10s)</p> <p>$23 + 12 = 35$</p> 	<p>Pictures / Symbols</p> <p>$23 + 12 = 35$</p>	<p>Number line (efficient jumps)</p> <p>$35 + 47$</p>  <p>[Also jumps can be in 10s and 1s]</p>	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Bonds up to 20 Pairs to 20 Pairs to 100 (using multiples of 10)</p>	<p>TU + U / multiple of 10 U + U + U</p>	
<p>Y3</p>	<p>TU + TU (bridging 100) HTU + TU (not bridging 1000) HTU + HTU (not bridging 1000)</p>	<p>Number line</p> <p>$57 + 285 = 342$</p> 	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Partitioning and expanded vertical</p> $\begin{array}{r} 336 \\ + 87 \\ \hline 13 \\ 110 \\ 300 \\ \hline 423 \end{array}$	<p>Bonds to 20 / 100 Pairs of two-digit multiples of 10 Multiples of 50 that total 1000</p>	<p>TU + U / TU TU + near multiple of 10</p>	
<p>Y4</p>	<p>HTU + TU HTU + HTU (incl bridging 1000)</p> <p>Decimals: money (£7.85 + £3.49)</p>	<p>Number line</p> <p>$374 + 248 =$</p> 	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Partitioning and expanded vertical</p> $\begin{array}{r} 374 \\ + 248 \\ \hline 12 \\ 110 \\ 500 \\ \hline 622 \end{array}$	<p>Formal Method</p> $\begin{array}{r} 374 \\ + 248 \\ \hline 622 \\ 11 \end{array}$	<p>Bonds to 1000 Derive sums of pairs of multiples of 10 / 100 / 1000 (Multiples of 50 that total 1000) Pairs of fractions to 1</p>	<p>TU + TU (Pairs of multiples of 10 / 100 / 1000) Three, 2-digit multiples of 10 Two, three-digit multiples of 10</p>
<p>Y5</p>	<p>ThHTU + HTU</p> <p>Decimals up to 2dp (23.7 + 48.56)</p>	<p>Number line</p> <p>$1576 + 858 =$</p> 	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Partitioning and expanded vertical</p> $\begin{array}{r} 23.70 \\ + 48.56 \\ \hline 0.06 \\ 1.20 \\ 11.00 \\ 60.00 \\ \hline 72.26 \end{array}$	<p>Formal Method</p> $\begin{array}{r} 23.70 \\ + 48.56 \\ \hline 72.26 \\ 11 \end{array}$	<p>(derive) Bonds up to 1 (2dp) (derive) Bonds up to 10 (1dp)</p>	<p>Decimal + Decimal (eg 19.7 + 3.4)</p>
<p>Y6</p>	<p>Consolidate / extend Y5 including: Three numbers Decimals up to 3dp (context: measures)</p>	<p>Number line</p> <p>$3.243 \text{ km} + 18.07 \text{ km} =$</p>	<p>REAL EXPERIENCES. MAKING CONNECTIONS AND THE CONNECTIVE MODEL</p> 	<p>Partitioning and expanded vertical</p> $\begin{array}{r} 3.243 \\ + 18.070 \\ \hline 0.003 \\ 0.110 \\ 0.200 \\ 21.000 \\ \hline 21.000 \end{array}$	<p>Formal Method</p> $\begin{array}{r} 3.243 \\ + 18.070 \\ \hline 21.313 \\ 11 \end{array}$	<p>(as above)</p>	<p>Integer / decimal (1dp) + Integer / decimal (1dp)</p>

Estimation and checking