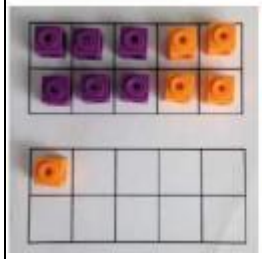
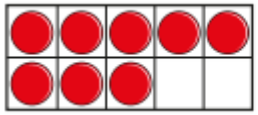
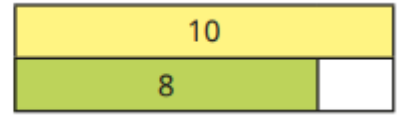
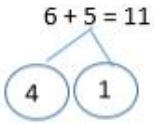
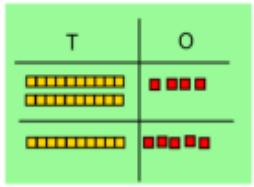
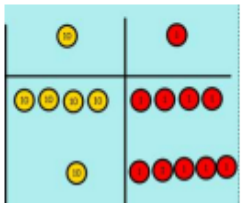
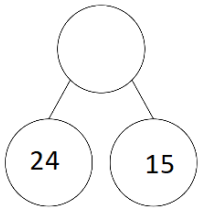
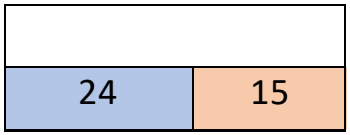
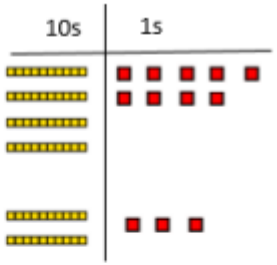
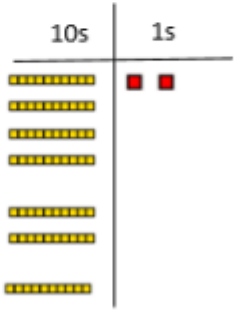
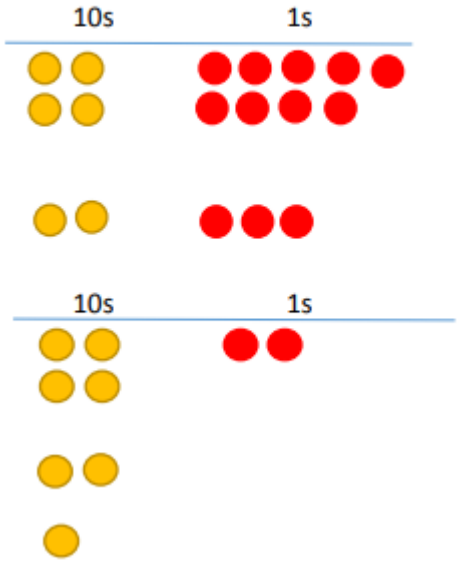
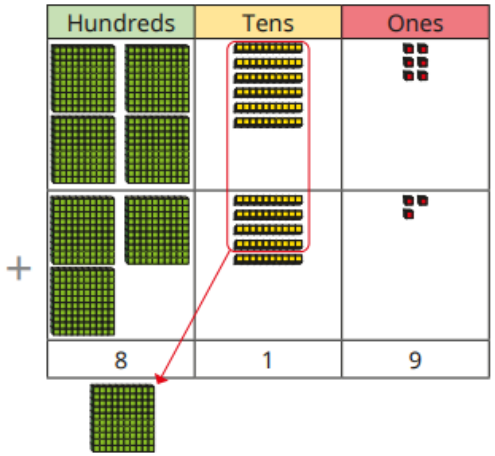
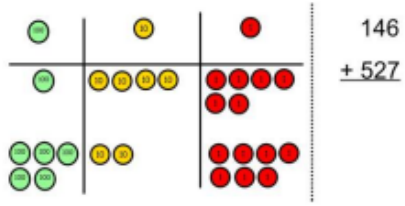
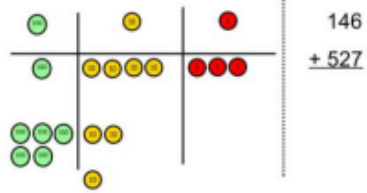
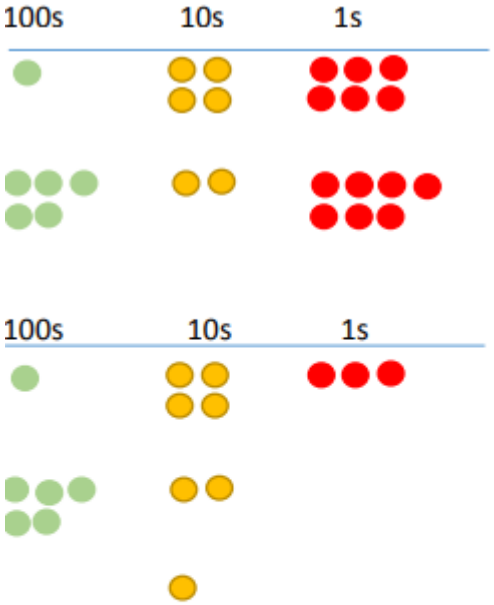
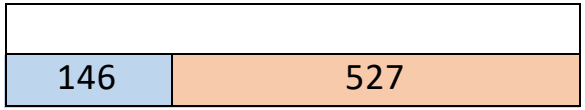
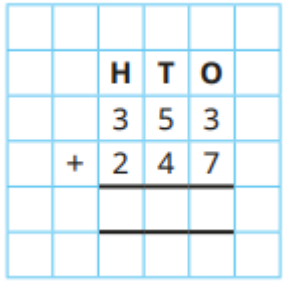
Addition

Year	Objective	Concrete	Pictorial	Abstract
1	Regrouping to make 10	6 + 4 = 10  6 + 5 = 11 Start with the bigger number and use the smaller number to make 10 A second 10 frame can be used to go beyond 10.	  How many more to make 10?   6 + 5 = 11 4 1 6 + 4 =10 10 + 1 = 11	8 + 2 = 10 6 + 5 = 11
2	Column method without regrouping (two 2-digit numbers).	Add together the ones first, then add the tens. Use the Base 10 blocks first before moving onto place value counters. 24 + 15 =  44 + 15 = 	After physically using the base 10 blocks and place value counters, children can draw the counters to help them to solve additions.  Part whole and bar models are good visuals as children progress from pictorial to abstract methods.  24 15  24 15	24 + 15 = 39 24 + 15 39

2	Column method with regrouping (two 2-digit numbers).	Make both numbers on a place value grid.  Add up the units and exchange 10 ones for 1 ten.  	Using place value counters, children can draw the counters to help them to solve additions.  Work out the wholes.  Bar models will provide a good visual as children progress from pictorial representations to abstract.	40 + 9 20 + 3 60 + 12 = 72 Children do not need to use the formal method at this stage but need to be encouraged to add the ones first. 20 + 9 50 + 3 70 + 12 = 82

3 and 4	Column method with regrouping	Base 10 will support conceptual understanding of number initially before progressing to place value counters.  Make both numbers on a place value grid.  Add up the units and exchange 10 ones for 1 ten.  As children move on to decimals, money and decimal place value counters can be used to support learning. **NB** By Year 4 children will progress on to adding four digit numbers.	 Children can draw a pictoral representation of the columns and place value counters to further support their learning and understanding. **NB** Addition of money needs to have £ and p added separately.  Bar models will provide a good visual as children progress from pictorial representations to abstract.	100 + 40 + 6 500 + 20 + 7 600 + 70 + 3 = 673 As the children progress, they will move from the expanded to the compacted method. 146 + 527 673 1 Encourage using squares when laying out additions and always starting with the ones or lowest place value column when progressing to decimals.  As the children move on, introduce decimals with the same number of decimal places and different. Money can be used here.

Addition

5 and 6	Consolidate understanding using numbers with more than 3 digits and extend by adding numbers up to 3 decimal places. Be mindful that concrete and pictorial representation will continue to support conceptual understanding for new learning and are good for retrieval. Some learners in higher year groups will still need to use concrete resources in lessons and pictorial representations so adaptive practice will be needed to ensure all children can access the learning.