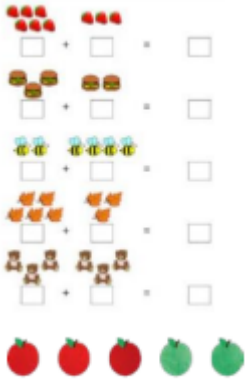
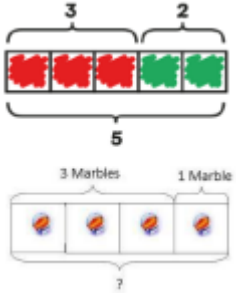
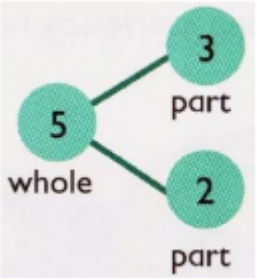
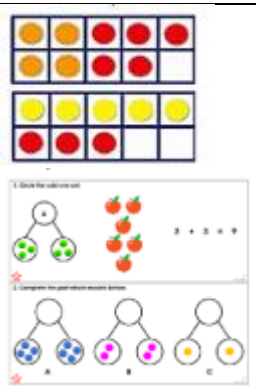
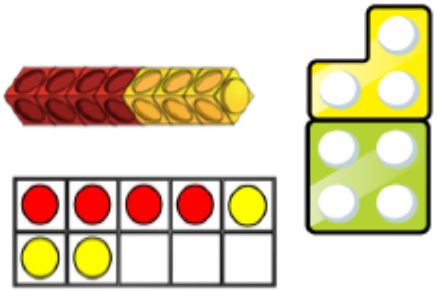
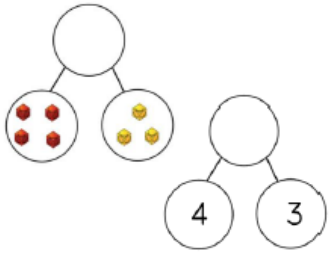
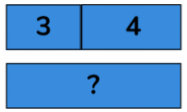
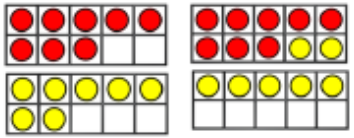
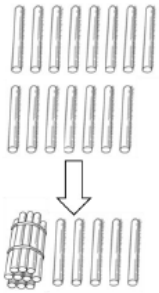
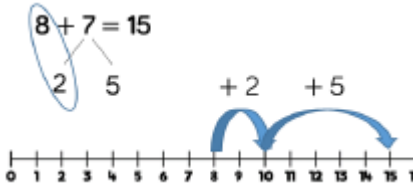
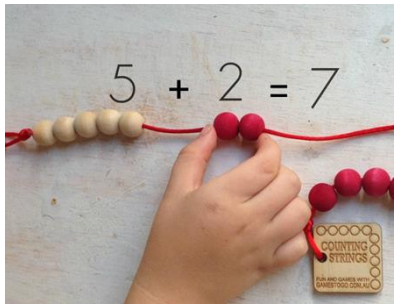
Reception			
Objective: Number	Concrete	Pictorial	Abstract
Match and sort Compare amounts Representing, comparing, composition of numbers 1-10 (completed in phases throughout the year) One more Introducing zero Bonds to 10	 Use toys and general classroom resources for children to physically manipulate, group/regroup. Use specific maths resources such as counters, cubes, Numicon etc. 	 Two groups of pictures so children are able to count the total.  Bar model using visuals, pictures/icons or colours.	5+2=7  A focus on symbols and numbers to form a calculation. No expectation for children to be able to record a number sentence/addition calculation.

Building numbers beyond 10 Adding more Even and odd	Use visual supports such as ten frames, part part whole and addition mats, with the physical objects and resources that can be manipulated. Visual timetable Noticing and subitising- what do you see? How can you see it? Move it to prove it	 Use visual supports such as ten frames, part part whole and addition mats with pictures/icons.	

Year 1			
Objective / strategy	Concrete	Pictorial	Abstract
Combining two parts to make a part, part, whole model.	 Use cubes, Base ten, tens frames or bead string to add two numbers together as a group or in a bar.	 3 + 4 = ?  3 + 4 = 7 Use pictures to add two numbers together as a group or in a bar.	$4 + 3 = 7$ Once children have become secure in using the part-part whole model move to the abstract.

Addition by starting at the bigger number and counting on in ones.	 Starting with the larger number and then counting on to the smaller number 1 by 1 to find the answer. This can be done with cubes, counter or bead strings.	 Start at the larger number on the number line an count on in ones. As this skill develops children should be able to do this in one jump.	5 + 12 =17 So 12 + 5 = 17 Place the larger number in your head and count on the smaller number to find your answer.
Regrouping to make 10. This is an essential skill for column addition later.	  Start with the bigger number and use the smaller number to make 10.	If children are able to regroup to make ten using concrete and pictoral then move to the abstract.	 Using pictures or a number line. Regroup or partition the smaller number using the part, part, whole model to make 10. Use partitioning to complete write calculation.

Represent through imagery & use number bonds within numbers to 20. Also use subtraction facts.			Emphasis should be on the language: *'1 more than 5 is equal to 6.'* *'2 more than 5 is 7.'* *'8 is 3 more than 5.'*

Key questions and vocabulary

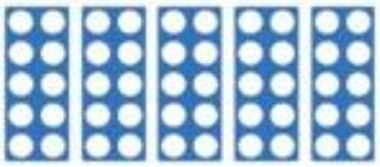
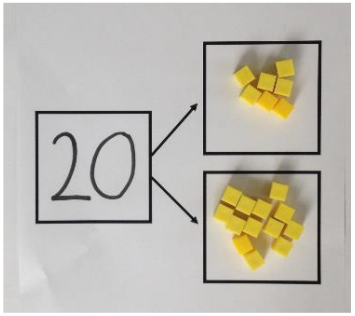
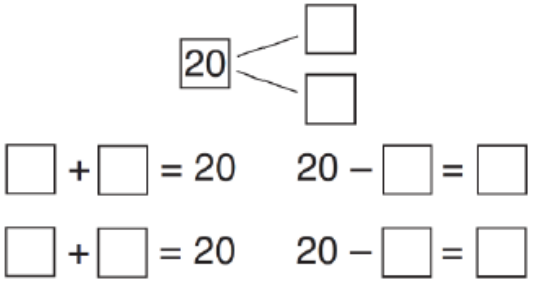
+, add, more, plus, make, sum, total, altogether, double, one more, two more, ten more, regrouping, number bonds, tens, ones, tens frame.

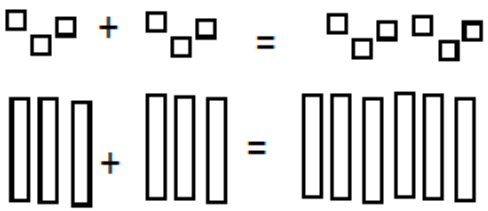
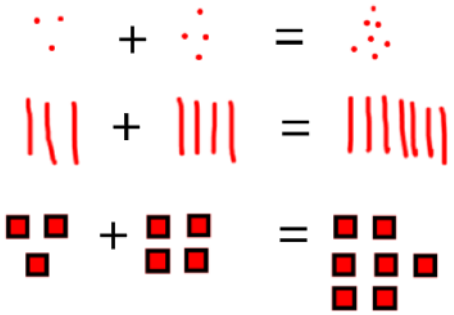
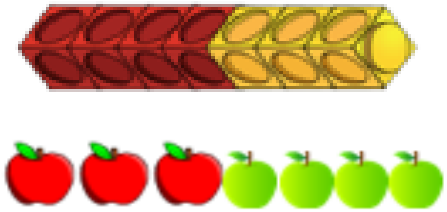
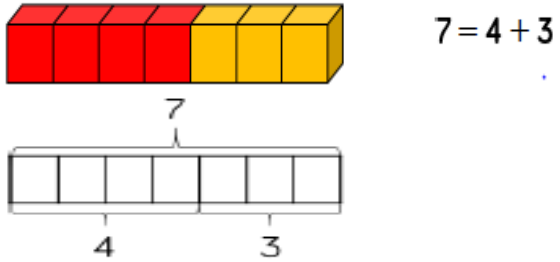
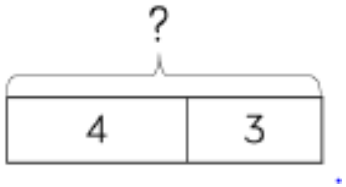
How many more to make...?

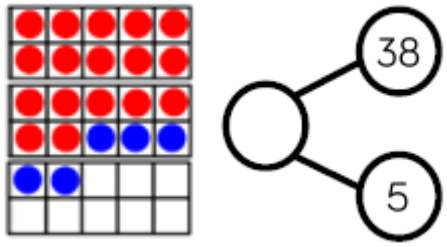
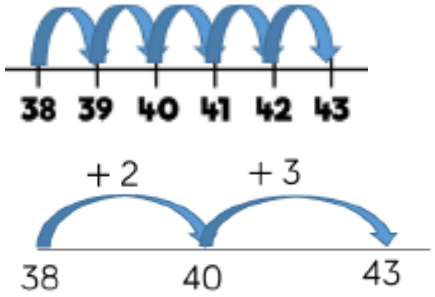
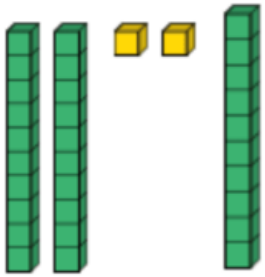
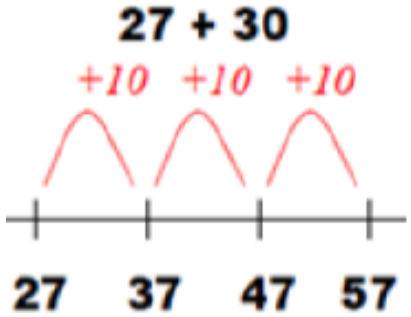
How many more is... than...?

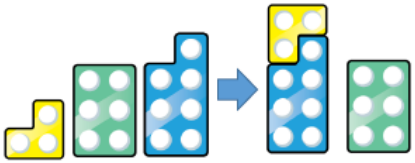
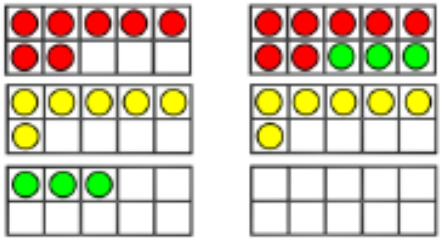
How much more is...?

Year 2			
Objective / strategy	Concrete	Pictorial	Abstract

Adding multiples of 10	 Children to explore adding doubles of 10 using a range of resources. This could include numicon or bead strings.	 3 tens + 5 tens = ☐ tens 30+50=☐ Using representations for base 10.	20+30=50 50=30+20 30+☐=50
Use known fact's part, part, whole model.	 Chidren explore ways of making numbers within 20.	 ☐ + ☐ = 20 20 − ☐ = ☐ ☐ + ☐ = 20 20 − ☐ = ☐	☐ + 1 = 16 16 − 1 = ☐ 1 + ☐ = 16 16 - ☐ = 1

Using known facts	 Use known facts from to support additon on two digit numbers.	 Children draw representations of H, T and Os	3 + 4 = 7 30 + 40 = 70 300 + 400 = 700
Bar model	 Cubes and objects can be used in a line as a concrete representation of the bar model.	 Discrete bar models are a good starting point with smaller numbers. Each box represents one whole.	 Continuous bar models are useful for a range of values. Each rectangle represents a number. The question mark indicates the value to be found.

Adding 1-digit and 2-digit numbers to 100.	 Exploring patterns within numbers and partitioning to find the next ten.	 Children to first add 1-digit at a time on a number line. Then move to partioning nad jumping to the next ten.	38 + 5 = 43 Explore relative facts: 38 + 5 = 43 5 + 38 = 43 43 – 5 = 38 43 – 38 = 5
Add a 2 digit number and a 10	 23 + 10 = 33 Explore the concept that the 1 digit does not change.	 Use part, part, whole and number line to model.	27 + 30 = 57 Children to record the additon problem in a number sentence. Explore relative facts: 27 + 10 = 37 27 + 20 = 47 27 + ? = 57

Add 3 1-digit numbers	 Combine to make 10 first if possible before adding the third digit.	 Regroup and draw representations.	$7 + 6 + 3 = 16$ $7 + 6 + 3 = 16$ 10 Combine the two numbers that make ten then add on the third.

Key questions and vocabulary

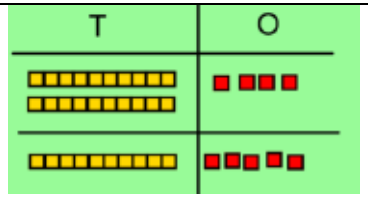
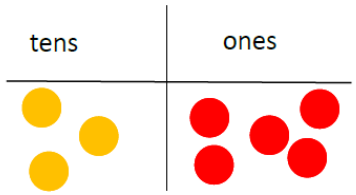
+, add, addition, more, plus, make, sum, total, altogether, score, double, near double, one more, two more... ten more... one hundred more

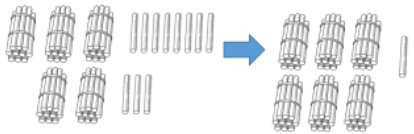
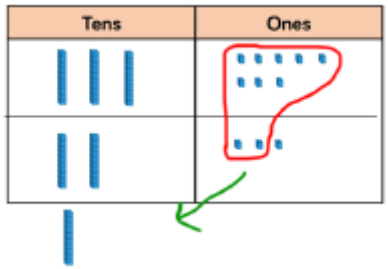
Regrouping

how many more to make...?

how many more is... than...?

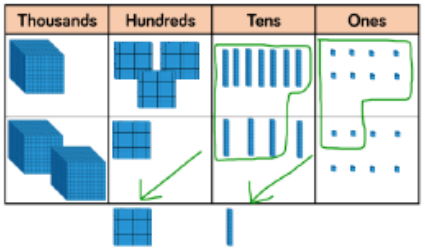
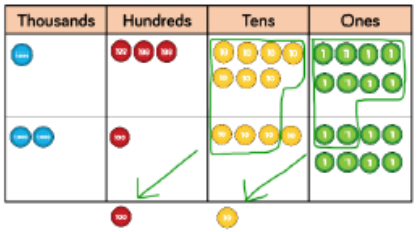
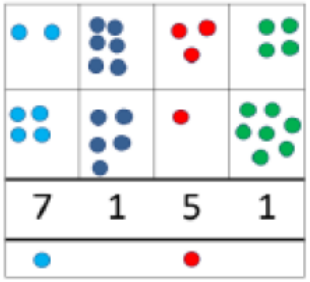
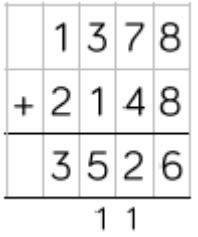
how much more is...?

Year 3			
Objective / strategy	Concrete	Pictorial	Abstract
Column Addition: no regrouping and using friendly numbers) Add two or three 2 or 3-digit numbers.	 24 + 15 = Add together the ones first, then the tens. Model using Base 10 or numicon. Move to using place value counters.	 21 + 14 = Children move to drawing the counters using a tens and one frame.	Expanded column additon 243 = 200 + 40 + 3 +435 = 400 + 30 + 5 678 = 600 + 70 + 8 Then look at expanded method when the ones will change the value of the tens- introduction to regrouping. 67 = 60 + 7 +24 20 + 4 91 = 80 + 11 End point is for children to be confident for addition without the expanded method.

			2 2 3 + 1 1 4 3 3 7
Column addition with regrouping.	 38 + 23 = 61 Exchange ten ones for a ten. Discussing regrouping using objects. Then model using counters or Base 10.	 Children to draw a representation of the grid to further support their understanding, carrying the ten underneath the line.	Start by prtitioning the numbers before formal column addtion. This helps to embed the idea od exchanging. 38 + 23 61 1

Key vocabulary and questions
+ , add, addition, more, plus, make, sum, total, altogether, exchanging, regrouping, increase by, ascend, one more, two more... ten more... one hundred more how many more to make...? how many more is... than...? how much more is...?

Year 4			
Objective / strategy	Concrete	Pictorial	Abstract

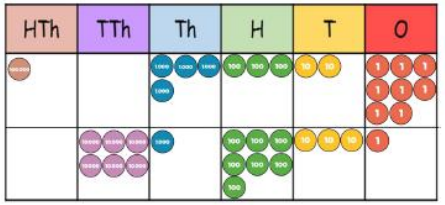
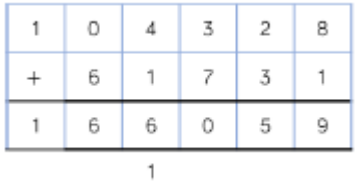
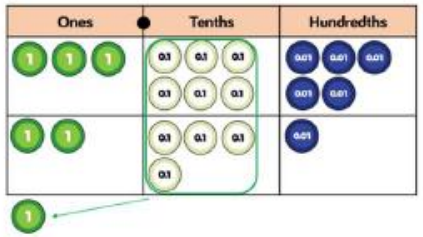
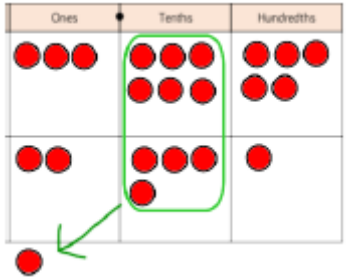
Add numbers with up to 4 digits	  Children continue to use Base 10 or place value counters to add, exchanging ten ones for a ten and ten tens for a hundred and ten hundreds for a thousand.	 Draw representations using a place value grid.	 Continue from previous work to carry hundreds as well as tens. Relate to money and measures.

Key vocabulary and questions

add, addition, more, plus, increase, sum, total, altogether, score, double, near double, exchanging, carrying

how many more to make...?

Year 5

Objective / strategy	Concrete	Pictorial	Abstract
Add numbers with more than 4-digits.	Place value counters or plain counters on a place value grid are the most effective concrete resource when adding numbers with more than 4 digits. 		At this stage children should be encouraged to work in the abstract, using the column method to add larger numbers efficiently. 
Add decimals with 2 decimal places, including money.	 Introduce decimal place value counters and model exchange for addition.		3.65 + 2.41 6.06 1

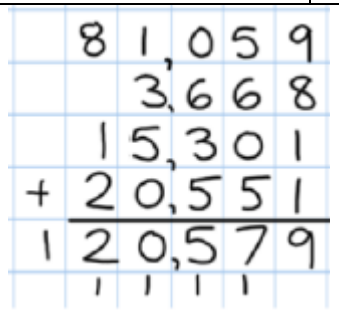
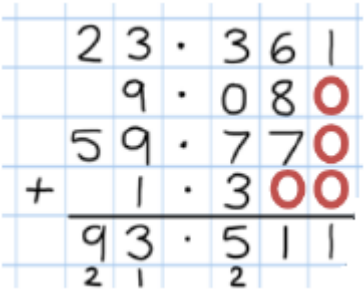
Key Vocabulary and questions

add, addition, more, plus, increase, sum, total, altogether, score, double, near double, equals, sign, is the same as, tens boundary, hundreds boundary ones boundary, tenths boundary

how many more to make...?

how many more is... than...?

how much more is...?

Year 6			
Objective / strategy	Concrete	Pictorial	Abstract
Add several numbers of increasing complexity Including adding money, measure and decimals with different numbers of decimal points.	See year 5	See year 5	 

Key vocabulary and questions

add, addition, more, plus, increase, sum, total, altogether, score, double, near double, equals, sign, is the same as, tens boundary, hundreds boundary ones boundary, tenths boundary

how many more to make...?

how many more is... than...?

how much more is...?