Adding 1 and 2 | Bonds to 10 | Adding 10 | Bridging/ compensating | Y1 facts / Y2 facts | Y1/2
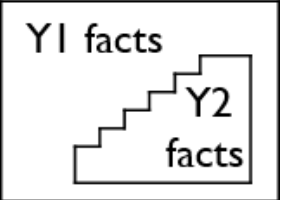
Doubles | Adding 0 | Near doubles

ADDITION + SUBTRACTION -
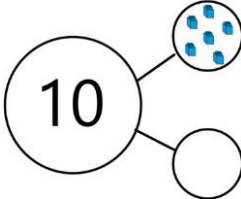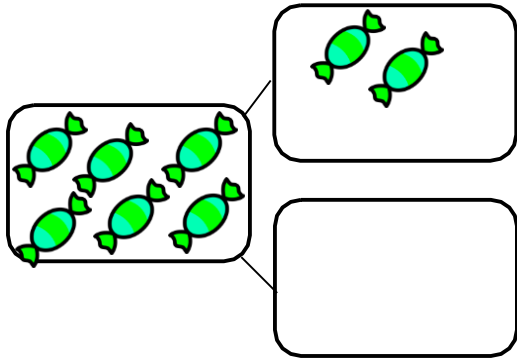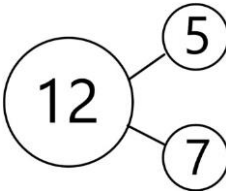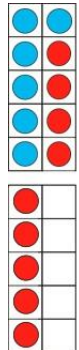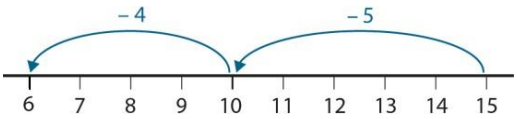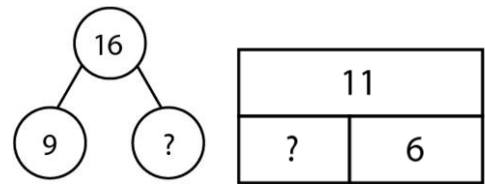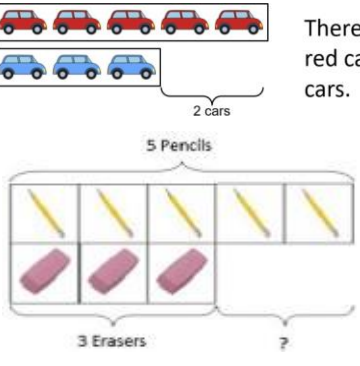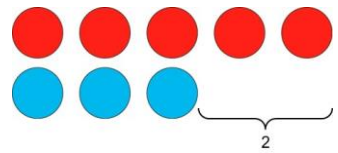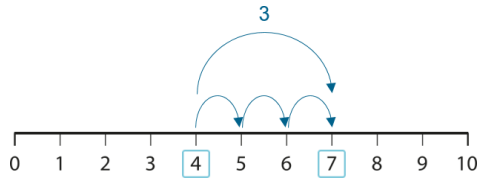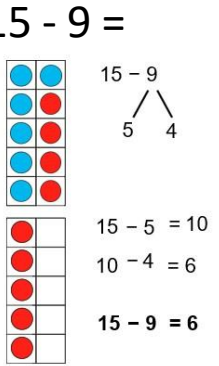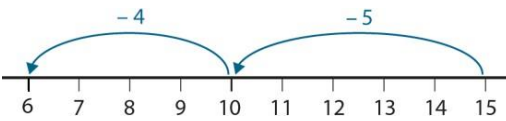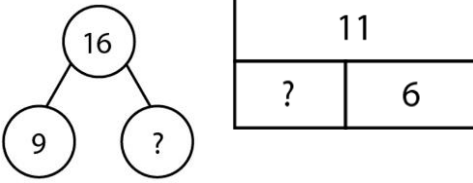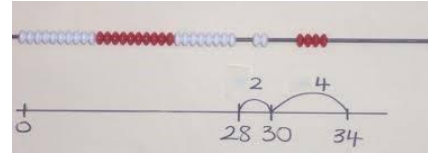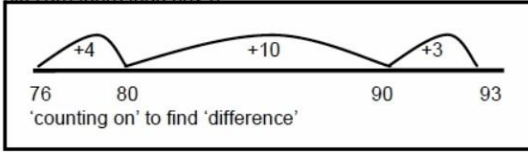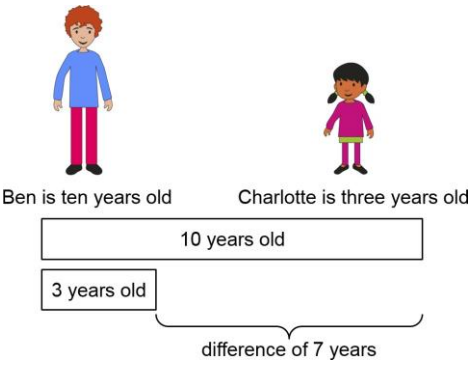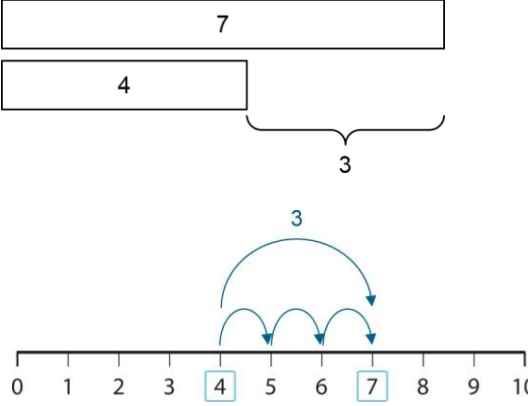
+	0	1	2	3	4	5	6	7	8	9	10
0	0 + 0	0 + 1	0 + 2	0 + 3	0 + 4	0 + 5	0 + 6	0 + 7	0 + 8	0 + 9	0 + 10
1	1 + 0	1 + 1	1 + 2	1 + 3	1 + 4	1 + 5	1 + 6	1 + 7	1 + 8	1 + 9	1 + 10
2	2 + 0	2 + 1	2 + 2	2 + 3	2 + 4	2 + 5	2 + 6	2 + 7	2 + 8	2 + 9	2 + 10
3	3 + 0	3 + 1	3 + 2	3 + 3	3 + 4	3 + 5	3 + 6	3 + 7	3 + 8	3 + 9	3 + 10
4	4 + 0	4 + 1	4 + 2	4 + 3	4 + 4	4 + 5	4 + 6	4 + 7	4 + 8	4 + 9	4 + 10
5	5 + 0	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5	5 + 6	5 + 7	5 + 8	5 + 9	5 + 10
6	6 + 0	6 + 1	6 + 2	6 + 3	6 + 4	6 + 5	6 + 6	6 + 7	6 + 8	6 + 9	6 + 10
7	7 + 0	7 + 1	7 + 2	7 + 3	7 + 4	7 + 5	7 + 6	7 + 7	7 + 8	7 + 9	7 + 10
8	8 + 0	8 + 1	8 + 2	8 + 3	8 + 4	8 + 5	8 + 6	8 + 7	8 + 8	8 + 9	8 + 10
9	9 + 0	9 + 1	9 + 2	9 + 3	9 + 4	9 + 5	9 + 6	9 + 7	9 + 8	9 + 9	9 + 10
10	10 + 0	10 + 1	10 + 2	10 + 3	10 + 4	10 + 5	10 + 6	10 + 7	10 + 8	10 + 9	10 + 10
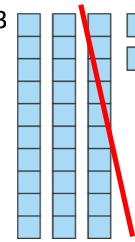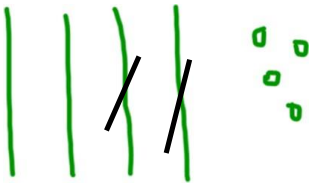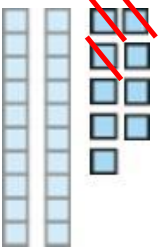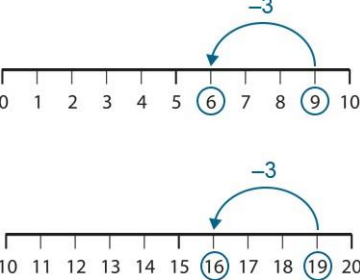
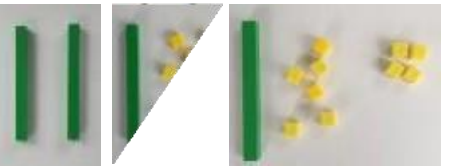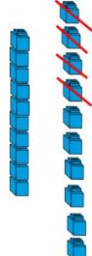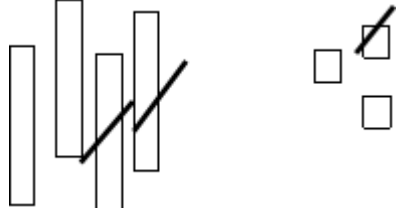| Objective & Strategy	Concrete	Pictorial	Abstract
Represent and use number bonds and related subtraction facts within 20 Part-Part-Whole model	Link to addition. Use PPW model to model the inverse. 10 If 10 is the whole and 6 is one of the parts, what s the other part? 10—6 = 4	Use pictorial representations to show the part.	Move to using numbers within the part whole model. 12 — 5 — 7 $12 - 5 = 7$ $12 - 7 = 5$ $7 = 12 - 5$ $5 = 12 - 7$
Subtract by making ten	$15—9$ Make 15 on the ten frame. Take 5 away to make ten, then take 4 more away so that you have taken 9. $15 - 9$ 5 4 $15 - 5 = 10$ $10 - 4 = 6$ $15 - 9 = 6$	$15 - 9$ -4 -5 6 7 8 9 10 11 12 13 14 15 Jump back 5 first, then another 4. Use ten as the stopping point.	$16—9$ How many do we take off first to get to 10? How many left to take off? 16 / 9 / ? 11 / ? / 6
Compare numbers by finding the difference.	There are 2 more red cars than blue cars. 2 cars 5 Pencils 3 Erasers ? There are 2 more pencils than erasers.	2 $5 - 3 = 2$ Use a number line to count on.. 3 0 1 2 3 4 5 6 7 8 9 10	Hannah has12 sweets and her sister has 5. How many more does Hannah have than her sister?
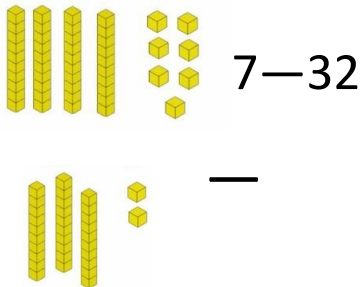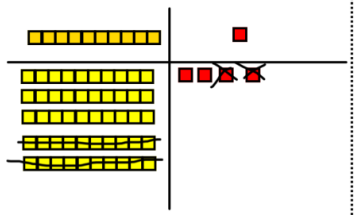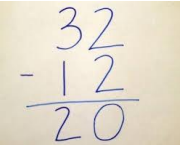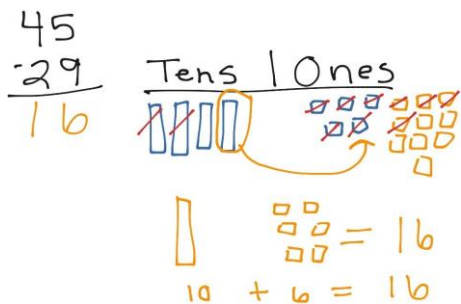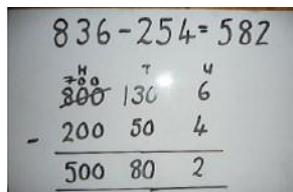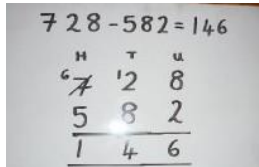
Y1 SUBTRACTION -

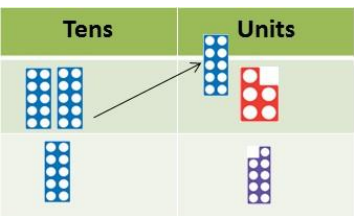| Objective & Strategy	Concrete	Pictorial	Abstract
Subtracting by making 10	Make 15 on the ten frame. Take 5 away to make ten, then take 4 more away so that you have taken 9. $15 - 9 =$ $15 - 9$ $5 \quad 4$ $15 - 5 = 10$ $10 - 4 = 6$ $15 - 9 = 6$	$15 - 9 =$ -4 $\quad$ -5 6 7 8 9 10 11 12 13 14 15 Jump back 5 first, then another 4. Use ten as the stopping point.	$16 - 9 =$ How many do we take off first to get to 10? How many left to take off? 16 — 9 — ? 11 / ? / 6
Counting on to next ten *Progression should be crossing one ten, crossing more than one ten, crossing the hundreds.*	$34 - 28 =$ 2 $\quad$ 4 28 30 $\quad$ 34 $34 - 28$ Use a bead bar or bead strings to model counting to next ten and the rest. 28 to 30 is 2, 30 to 34 is 4. So, 34 - 28 = 6	+4 $\quad$ +10 $\quad$ +3 76 $\quad$ 80 $\quad$ 90 $\quad$ 93 'counting on' to find 'difference' Use a number line to count on to next ten and then the rest. Begin with bead line, move to landmarked line then to ENL.	$93 - 76 = 17$ $76 \longrightarrow 80 = 4$ $80 \longrightarrow 93 = 13$ $13 + 4 = 17$
Subtractions as difference	Ben is ten years old $\quad$ Charlotte is three years old 10 years old 3 years old difference of 7 years	7 4 3 3 0 1 2 3 4 5 6 7 8 9 10	The difference between 24 and 16 is 8.
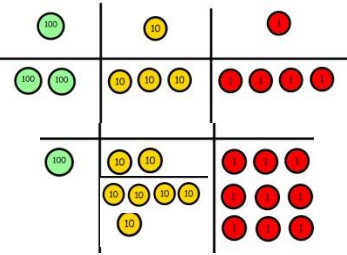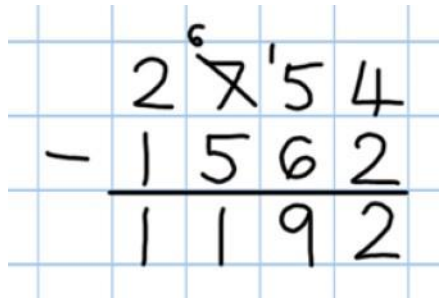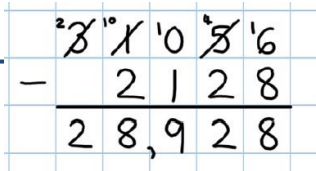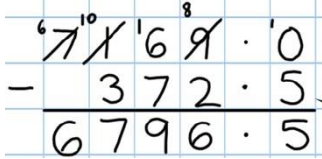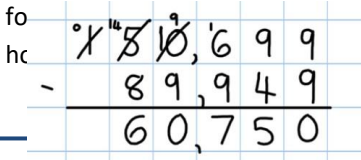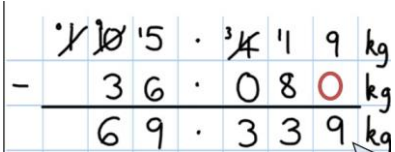
Y2 SUBTRACTION

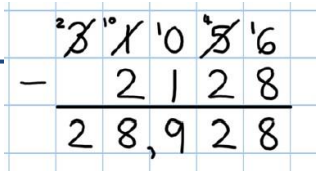| Objective & Strategy	Concrete	Pictorial	Abstract
Subtracting a multiple of 10	3 32 - 10 = 22 Children use dienes, PV counters or Numicon. They remove the correct number of tens	Children draw rods and cubes and cross off multiples of ten.	64 - 10 = ☐ 64 - 20 = ☐ 64 - 30 = ☐ 64 - ☐ = 24 ☐ - 50 = 14
Subtract a single digit from a two digit number No regrouping	 Explore that 9 - 3 = 6 so 29 - 3 = 26 etc	 9 – 3 = 6 19 – 3 = 16	9 - 3 = 6 19 - 6 = 13 29 - 6 = 23 etc
Regroup a ten into ten ones	 Use a PV chart to show how to change a ten into ten ones, use the term 'take and make'.	20 - 4 = 16 	20—4 = 16
Partitioning to subtract without regrouping. 'Friendly numbers'	34—13 = 21 Use Dienes to show how to partition the number when subtracting without regrouping. 	43—21 = 22 Children draw representations of Dienes and cross off. 	43—21 = 22

Y2 SUBTRACTION -

Objective & Strategy	Concrete	Pictorial	Abstract
Column subtraction without regrouping (friendly numbers)	$7-32$ Use base 10 or Numicon to model	Calculations $\begin{array}{r} 54 \\ -22 \\ \hline 32 \end{array}$ Draw representations to support understanding	Intermediate step may be needed to lead to clear subtraction understanding. $47-24=23$ $\begin{array}{r} 40+7 \\ -\ 20+4 \\ \hline 20+3 \end{array}$ Leading to compact method. $\begin{array}{r} 32 \\ -12 \\ \hline 20 \end{array}$
Column subtraction with regrouping	Tens | Units Begin with base 10 or Numicon. Move to pv counters, modelling the exchange of a ten into tten ones. Use the phrase 'take and make' for exchange.	$\begin{array}{r} 45 \\ -29 \\ \hline 16 \end{array}$ Tens | Ones $10 + 6 = 16$ Children may draw base ten or PV counters and cross off.	Begin by partitioning into pv columns $836-254=582$ $\begin{array}{ccc} H & T & U \\ 800\ 700 & 130 & 6 \\ 200 & 50 & 4 \\ \hline 500 & 80 & 2 \end{array}$ Then move to formal method. $728-582=146$ $\begin{array}{ccc} H & T & U \\ ^6\cancel{7} & ^1 2 & 8 \\ 5 & 8 & 2 \\ \hline 1 & 4 & 6 \end{array}$

Objective & Strategy	Concrete	Pictorial	Abstract
Subtracting tens and ones Year 4 subtract with up to 4 digits. *Introduce decimal subtrac- tion through context of money*	234 - 179 Model process of exchange using Numi- con, base ten and then move to PV coun- ters.	Children to draw pv counters and show their exchange—see Y3	 Use the phrase 'take and make' for ex- change
Year 5- Subtract with at least 4 dig- its, including money and measures. *Subtract with decimal values, including mixtures of integers and decimals and aligning the decimal*	As Year 4	Children to draw pv counters and show their exchange—see Y3	 Use zeros fo hc
Year 6— Subtract with increasingly large and more complex numbers and decimal values.	Some children may need to use manipulatives and/or representations for longer. See year 5		

Y4-6 SUBTRACTION -