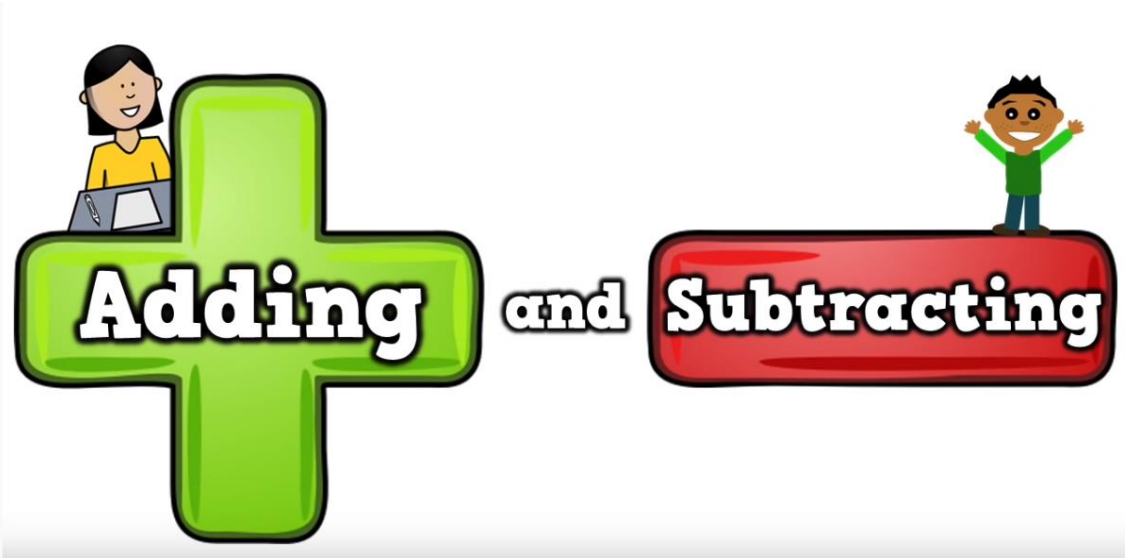
YEAR 2 MATHS



HOME LEARNING BOOK

Use patterns to complete this addition table:

a	3 + 5 =	30 + 50 =	300 + 500 =
b	6 + 2 =	60 + 20 =	600 + 200 =
c	4 + 1 =	40 + 10 =	400 + 100 =
d	7 + 3 =	70 + 30 =	700 + 300 =

Adding more than two numbers together is easier if we look for a ten. Circle the numbers that add to 10 first, then add what is left:

a (6) 3 (4) = ☐

b 1 5 5 = ☐

c 9 5 1 = ☐

d 7 6 3 = ☐

e 5 6 4 = ☐

f 2 1 8 = ☐

Circle the numbers that make 10. Look for sets going across and down. One set has been circled for you. How many more can you find?

6	3	1	6	9	2	8	5
4	1	3	3	3	8	3	5
3	7	1	4	6	2	5	3
3	3	9	6	3	1	2	7

Look for a ten and change the order of the numbers in each addition problem to make it faster to add.

a 4 + 5 + 3 + 5 + 6

_____ = ☐

b 9 + 3 + 7 + 1 + 5

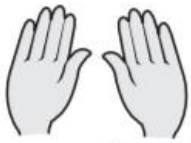
_____ = ☐

Addition mental strategies – doubles and near doubles

Doubles facts are the same number added together.

3 + 3 = 6 is the same as saying double 3 is 6.

1 **Write a doubles fact to match each picture:**

a Double the fingers: 

If I double ☐ I will get ☐

b Double the pencils: 

If I double ☐ I will get ☐

c Double the spots: 

If I double ☐ I will get ☐

d Double the lace holes: 

If I double ☐ I will get ☐

2 **Use these addition frames to double each of these numbers as quickly as you can:**

(5) (7) (9) (2) (12) (8)

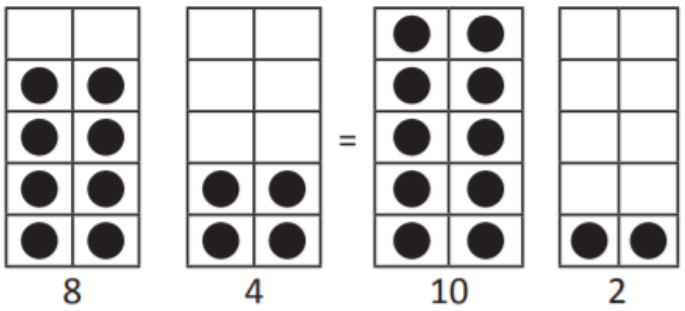
☐ + ☐ = ☐ ☐ + ☐ = ☐ ☐ + ☐ = ☐

☐ + ☐ = ☐ ☐ + ☐ = ☐ ☐ + ☐ = ☐

Addition mental strategies – bridge to ten

Bridge to ten is when we make the first number up to 10 and then add what is left.

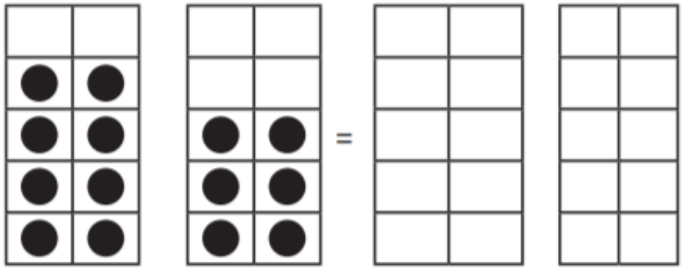
Let's start by using ten frames:



8 + 4 = 10 + 2 = 12

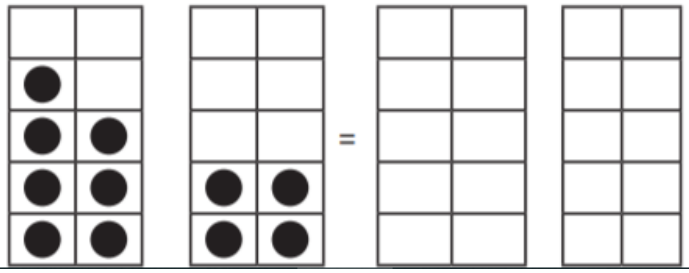
1 **Look carefully at the first set of ten frames. Bridge to ten on the second set and complete the addition.**

a



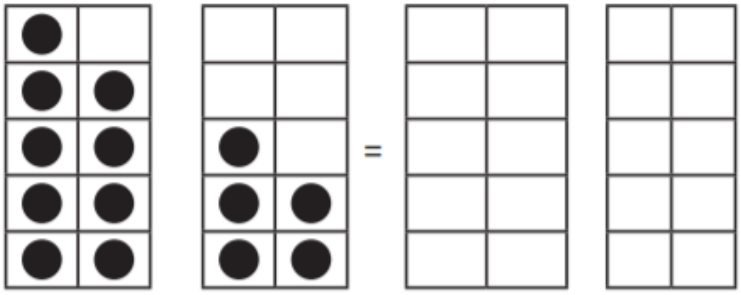
8 + 6 = 10 + ☐ = ☐

b



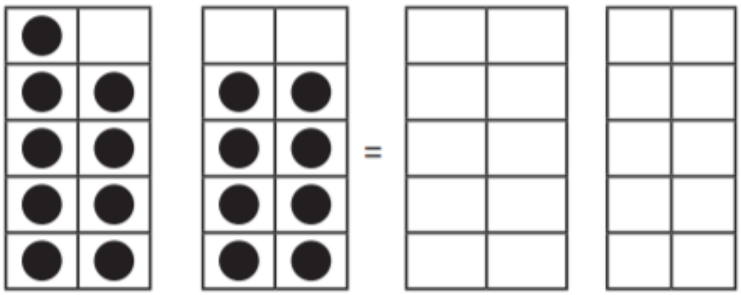
7 + 4 = 10 + ☐ = ☐

c



9 + 5 = 10 + ☐ = ☐

d

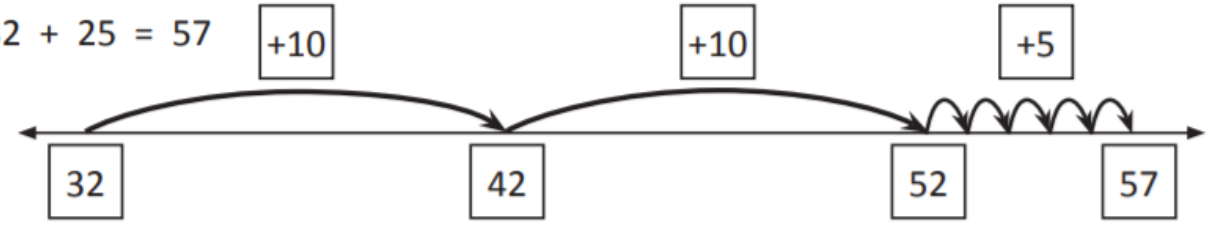


9 + 8 = 10 + ☐ = ☐

Addition mental strategies – jump strategy

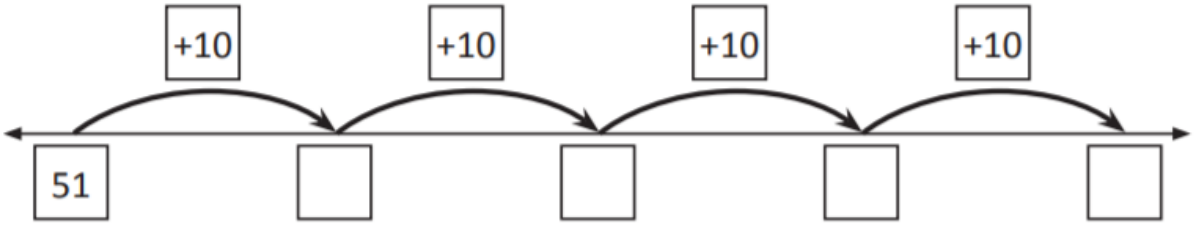
The jump strategy is when you use a number line to jump in tens and then ones.

32 + 25 = 57

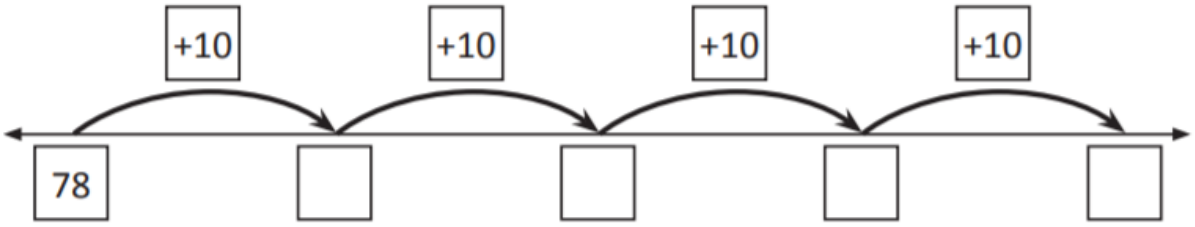


1 **Practise jumping along the number line in tens:**

a



b



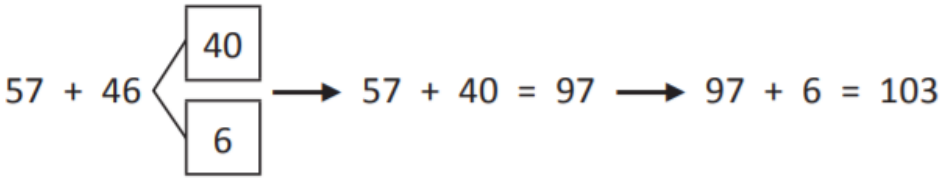
2 **Add these using the jump strategy. Show your working on each number line:**

a 57 + 35 = ☐

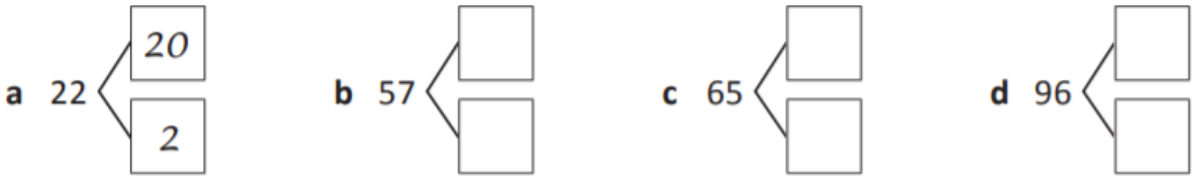
b 54 + 28 = ☐

c 162 + 35 = ☐

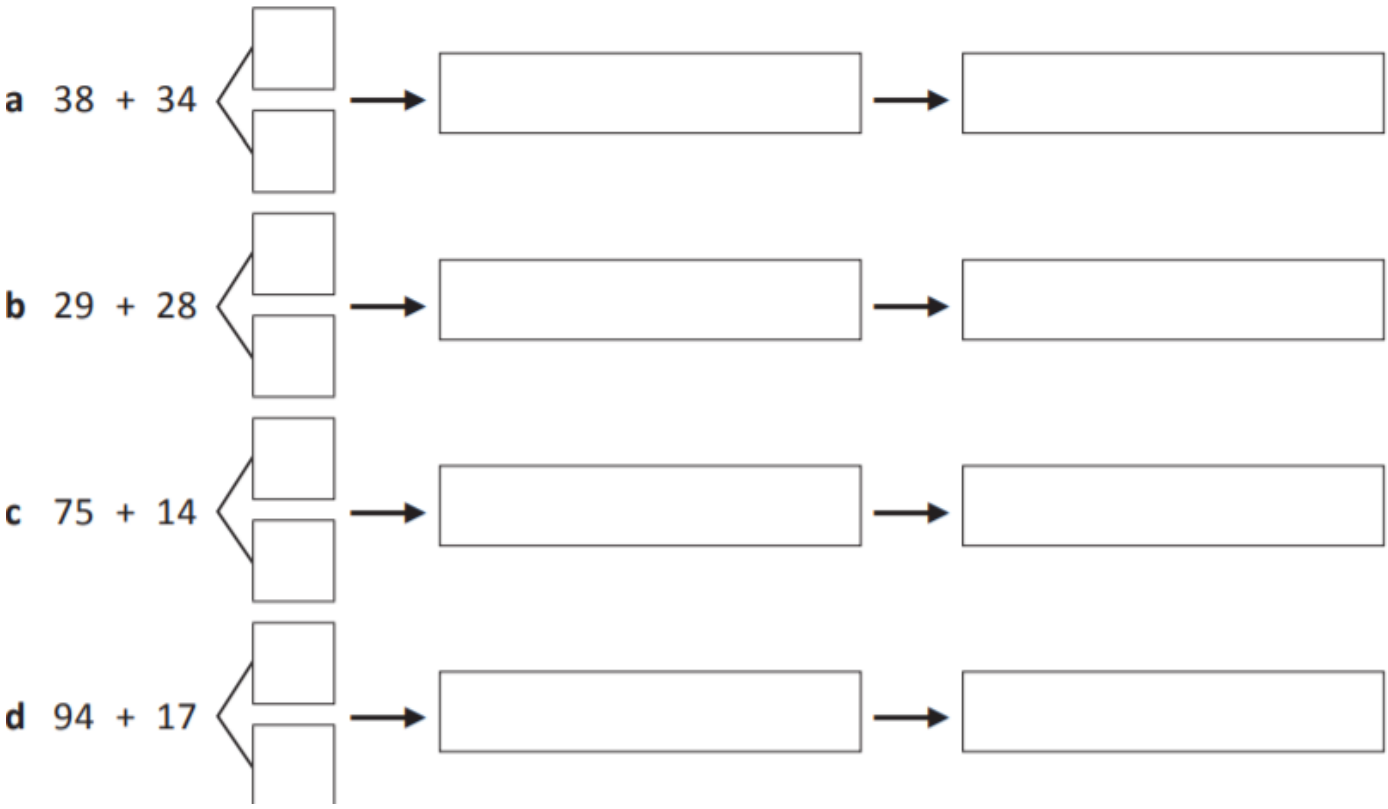
When adding large numbers in our heads, it can be easier to split one of the numbers into parts and add each part separately.



1 **Practise separating these numbers into tens and ones. The first one has been done for you.**



Use the split strategy with these problems:



Addition mental strategies – word problems

1 **Solve these word problems using either the jump or the split strategies. Show all your working.**

a Mitch and Anna held a lemonade stall over the weekend. They sold 25 cups on Saturday and 18 cups on Sunday. How many cups did they sell altogether?

b I practised my guitar for 48 minutes before school and 34 minutes after school. How many minutes did I practise altogether?

c Charlotte received £15 for her birthday from her grandmother. She added this to her savings account which has £53. How much does Charlotte have now?

Subtraction mental strategies – identify patterns

Recognising patterns in subtraction is useful in extending known facts.
Can you see the pattern in this set of facts?

17 – 3 = 14 37 – 3 = 34 27 – 3 = 24 47 – 3 = 44

1 **Extend each set of subtraction patterns in the sets below and then shade the answers on this grid:**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

a Set 1

8 – 2 = ☐
18 – 2 = ☐
28 – 2 = ☐
38 – 2 = ☐
48 – 2 = ☐
58 – 2 = ☐
68 – 2 = ☐
78 – 2 = ☐

b Set 2

25 – 4 = ☐
35 – 4 = ☐
45 – 4 = ☐
55 – 4 = ☐
65 – 4 = ☐
75 – 4 = ☐
85 – 4 = ☐
95 – 4 = ☐

c Set 3

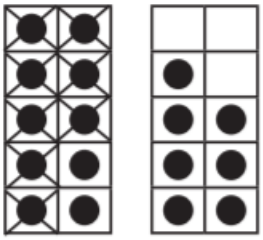
19 – 6 = ☐
29 – 6 = ☐
39 – 6 = ☐
49 – 6 = ☐
59 – 6 = ☐
69 – 6 = ☐
79 – 6 = ☐
89 – 6 = ☐

Subtraction mental strategies – bridge to ten

A ten frame is useful to show the bridge to ten strategy when subtracting.

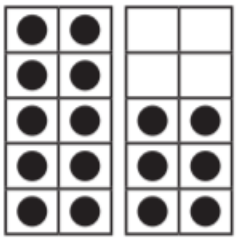
Here are 17 counters in 2 tens frames.

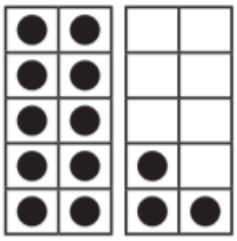
When you see 17 – 8 = ?, cross out 8 from the first ten frame then add what is left.

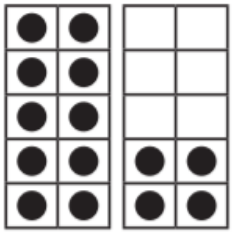


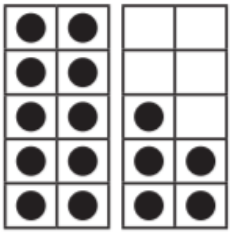
17 – 8 = 9

1 **Use each ten frame to subtract using bridge to ten. Cross out the number of counters that are subtracted from the first ten frame:**

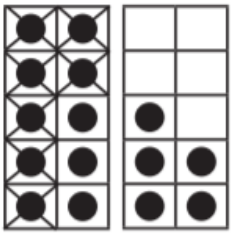
a  16 – 9 = ☐

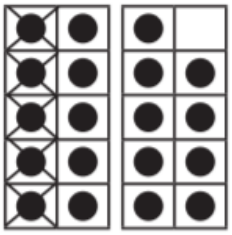
b  13 – 7 = ☐

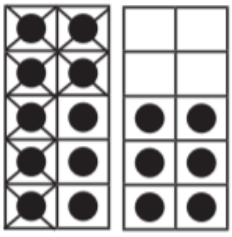
c  14 – 9 = ☐

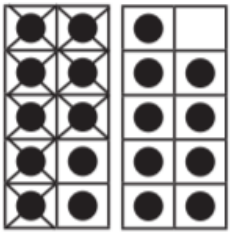
d  15 – 8 = ☐

2 **Write a subtraction fact that matches each ten frame:**

a  ☐ – ☐ = ☐

b  ☐ – ☐ = ☐

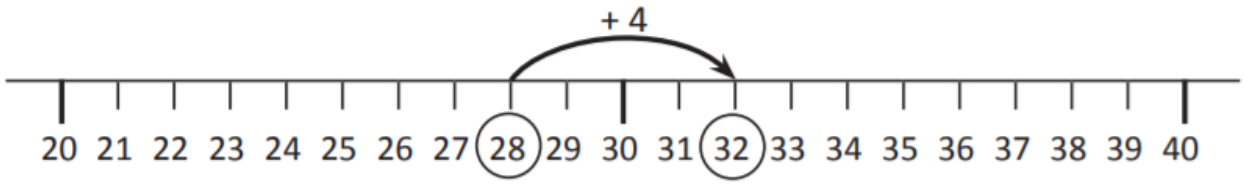
c  ☐ – ☐ = ☐

d  ☐ – ☐ = ☐

Subtraction mental strategies – counting on

If there is only a small difference between the numbers, use counting on to find the difference. See: 32 − 28 = ?

Think: What can you add to 28 to get 32? Count on by 4.



1 **Find the difference between these by counting on.**

a 32 − 29 = ☐ **b** 33 − 28 = ☐ **c** 34 − 27 = ☐

d 71 − 68 = ☐ **e** 82 − 76 = ☐ **f** 73 − 69 = ☐

g 83 − 77 = ☐ **h** 112 − 109 = ☐ **i** 201 − 196 = ☐

As long as you know addition doubles, you will know subtraction doubles.

5 + 5 = 10 so 10 − 5 = 5

1 **Answer the addition doubles and write a matching subtraction double.**

a 6 + 6 = ☐ so ☐ − ☐ = ☐

b 9 + 9 = ☐ so ☐ − ☐ = ☐

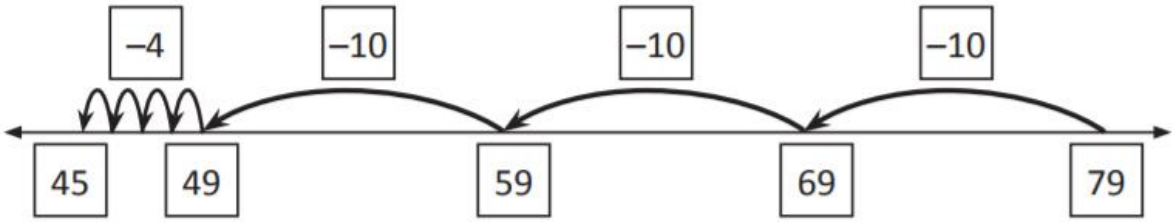
c 12 + 12 = ☐ so ☐ − ☐ = ☐

d 8 + 8 = ☐ so ☐ − ☐ = ☐

Subtraction mental strategies – jump strategy

The jump strategy is when you use a number line to jump in tens and then ones.

Look at 79 – 34. First we jump back in tens and then ones. So, 79 – 34 = 45.



1 **Subtract these using the jump strategy:**

a 78 – 25 = ☐

b 93 – 31 = ☐

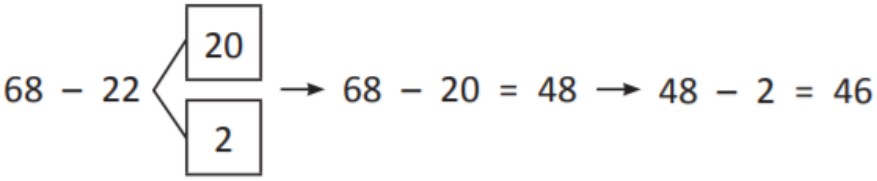
c 84 – 21 = ☐

d 79 – 36 = ☐

e 195 – 42 = ☐

Subtraction mental strategies – split strategy

The split strategy is where we make the subtraction easy by splitting the second number into tens and ones. We then subtract each part separately.



1 **Practise subtracting tens from these numbers:**

–	10	30	20	30	50
96					
71					

2 **Use the split strategy with these problems:**

a 73 – 34

b 96 – 65

c 81 – 24

d 69 – 23

e 106 – 43

Money – coin combinations

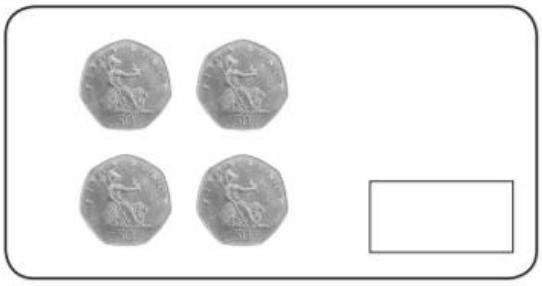
It is important to be able to recognise coins and add different combinations quickly.

1 **Label each of these coins:**

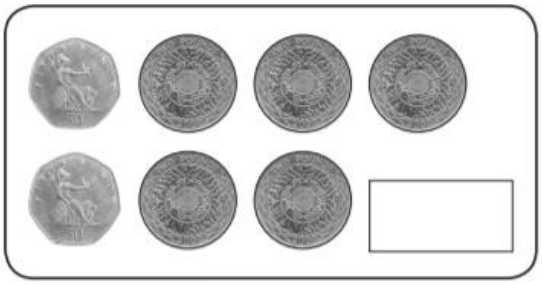
2 **Add each amount of coins:**

a

b



c



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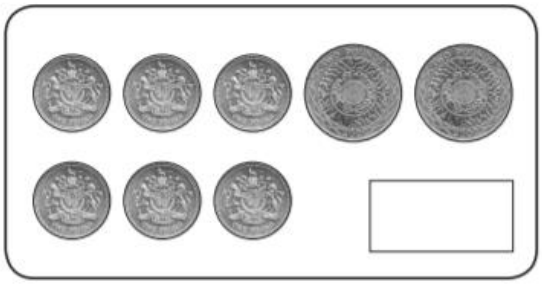

3 **Show £10 using a combination of all the coins in question 1.**