



1.

<https://www.bbc.co.uk/bitesize/topics/znj7hyc/articles/zkgjg8>

Success Criteria:

1. Watch the video about adding two 2-digit numbers
2. Read the explanation and remind yourself how to use a base ten for addition
3. Use the base ten to work out the addition calculations
4. Use the base ten to work out the addition calculations then draw your own lines and dots to work out the answers to the sums.

Model:

2. When we add two 2-digit numbers together, we can use base ten to help us. You can draw the Tens as lines and the Ones as dots when you do your working out:

$$34 + 23 = \begin{array}{|c|c|} \hline \text{||||} & \text{..} \\ \hline \end{array} + \begin{array}{|c|c|} \hline \text{||} & \text{..} \\ \hline \end{array}$$

Add the Tens: $30 + 20 = 50$

Then add the Ones by counting on from 50: 51,52,53,54,55,56,**57**

$$34 + 23 = 57$$

3. Now you try:

Use the base ten to work out the answers to these additions:

A.		+		=	38
B.		+		=	69
C.		+		=	68

4. Match the calculation to the correct answer:

A.		+		→	59
B.		+		→	77
C.		+		→	48

D. Draw your own base 10 lines and dots to solve these addition number sentences:

- 1) $24 + 15 = 39$
- 2) $32 + 36 = 68$

Canonbury Home Learning

Year 2/3 Maths

Lesson 2 – 07.07.2020

LO: Add 2-digit and 2 digit numbers crossing tens

Success Criteria:

We use addition in lots of everyday occurrences, like adding up how much pocket money you have saved, finding the total number of days left of term or adding ingredients to a cake. Addition is very important day to day!

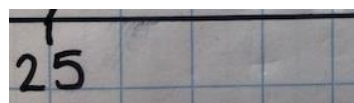
1. Year 2s, refresh your memory of adding using a number line.
2. Year 3s, refresh your memory of adding using column method.

Model: 2. In Year 2 we use number lines to add numbers together when we can't do the calculation in our heads. These numbers cross a ten, which makes it harder to do mentally:

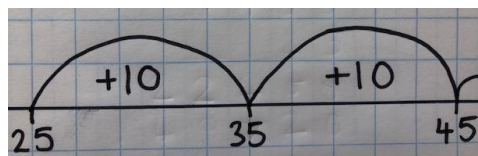
Partition the number that you are adding (e.g. $25 + 27 =$) into tens and ones

$$\begin{array}{r} 25 + 27 = \\ \quad \diagdown \quad \diagup \\ \quad 20 \quad 7 \end{array}$$

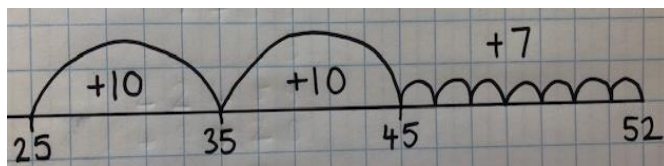
Start a number line from the first number (e.g. $25 + 27 =$)



Make your tens jumps (e.g. $25 + 27 =$) two jumps of ten from 25) and mark the numbers on the number line



Make your ones jumps (e.g. $25 + 27 =$ seven jumps of one from 45) and mark the number on the number line



3. In Year 3 we use column addition to add numbers together when we can't do the calculation in our heads:

	T	U
+	2	5
	2	7

	T	U
+	2	5
	2	7
	1	
		2

	T	U
+	2	5
	2	7
	1	
	5	2

Write the two numbers on top of each other, in their correct place value columns (e.g. Tens and Units)

Always begin by adding the Units first. $5+7 = 12$ which goes over 10, so we put the one 10 into the Tens column and the 2 stays in the Units column.

Next add the numbers in the Tens column. $2+2+1 = 5$ lots of ten. Write the 5 in the Tens column.

Your answer to $25 + 27 = 52$

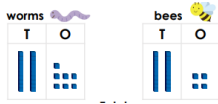
Task 1	Task 2
<p style="text-align: center;"><u>Practice</u></p> <p>Year 2s use a number line and Year 3s use column method to solve these addition calculations:</p> <p>a) One morning Athena class had 24 children present, and Odysseus had 29 children at school. How many children were in Y2 that day? $24 + 29 = 53$</p> <p>b) There were 17 apples and 15 satsumas for playtime snacks, how many pieces of fruit were there altogether? $17 + 15 = 32$</p> <p>c) Cassie gave out 56 dojos and Kaya gave out 48 dojos on Thursday. What was the sum of the dojos in Y2? $56 + 48 = 104$</p> <p>d) Cherelle raised £18 from the Canonbury Fun Run and Oliver raised £25. How much money did they raise in total? $£18 + £25 = £43$</p>	<p style="text-align: center;"><u>Practice</u></p> <p>Year 3s use column method to answer these addition calculations</p> <p>a) Sarah's cycle to school took 28 minutes and Juliet's took 25 minutes more than Sarah's. What is the total length of time the teachers were on their bikes? $Juliet = 28 + 25 = 53$ $Sarah + Juliet = 28 + 53 = \mathbf{81 \text{ minutes}}$</p> <p>b) Martine ordered 29 Maths books for each Year 3 class. She then ordered the same amount of English books. How many books altogether did Martine order for Year 3? $29 + 29 = 58 \text{ Maths}$ $58 \text{ Maths} + 58 \text{ English} = \mathbf{116 \text{ books}}$</p> <p>c) In June, Patrick sent 96 emails and so far this month he has sent half that amount. How many emails has Patrick sent so far since the start of June? $\frac{1}{2}$ of $96 = 48$ $96 + 48 = \mathbf{144 \text{ emails}}$</p> <p>d) Simon put up a tent so that the children could have shade from the sun. There were 2 poles each measuring 1m 56cm. What is the sum of the pole's lengths? $1\text{m} + 1\text{m} = 2\text{m}$ $56\text{cm} + 56\text{cm} = 112\text{cm} (1\text{m } 12\text{cm})$ $2\text{m} + 1\text{m } 12\text{cm} = \mathbf{3\text{m } 12\text{cm}}$</p>

Task 3

Reasoning

Explain your answers.

Tony the zookeeper is trying to count the animals he is looking after.



He says,



There are 27 worms and 24 bees. There are 52 insects in total.

Is Tony correct?

Using addition, explain why.

Tony is incorrect.

Although he has exchanged his ten ones for one ten, he has added an extra one. The answer should be 51 because $27 + 24 = 51$.

Ana the zookeeper is trying to count the birds she needs to feed.



There are 38 big birds and 34 small birds. I will need to feed 42 birds in total.

Is Ana correct?

Using addition, explain why.

Ana is incorrect.

Although she has added the ones up correctly, she has forgotten to add the extra 10 in the tens column. There are 72 birds altogether, not 62.

Sophie the zookeeper is trying to count the animals she needs to feed.

zebras monkeys



There are 27 zebras and 46 monkeys. I will need to feed eighty-three animals in total.

Is Sophie correct?

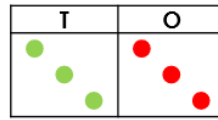
Using addition, explain why.

Sophie is incorrect. Although she has added the ones up correctly, she has also added in an extra 10 when it is not needed. There are 73 animals altogether, not 83.

Task 4

Problem solving

4b. Oliver has a number shown below:



Which number below can be added to Oliver's to equal 92?

- A. 57
- B. 58
- C. 59

C

5b. When added together, the numbers must total more than 54.

- A.
- B. 26
- C. 29
- D.

Match the numbers above to create two pairs.

A and D; B and C

Lisa has 80p to spend at the school tuck shop. She buys two different items.


















Investigate the different combinations of items she could buy.

- | | | | |
|---------|---------|---------|---------|
| 47p
 | 28p
 | 39p
 | 29p
 |
| 26p
 | 25p
 | 26p
 | 36p
 |

Various answers, for example: 47p (banana) + 26p (cucumber sticks) = 73p; 28p (apple) + 36p (cheese) = 64; 26p (peas) + 25p (orange) = 51p

Challenge

2. Pirate Pete is collecting gold coins to buy a pirate ship. He already has 10 gold coins. He has to collect more than 10 coins each time but the total must be less than 100.

Start	 	+		+		+
	+		+		+	
		+		+		+
	+		+		+	
		+		+		

Help Pirate Pete find a route to the ship where he collects no more than 99 coins.
 Various answers, for example: $10 + 21 + 12 + 17 + 15 + 11 + 12 = 98$