

1. Read the explanation and remind yourself how to use base ten for subtraction
2. Use the base ten to work out the subtraction calculations
3. Draw your own lines and dots to work out the answers to the subtractions

## Model:

1. When we subtract two numbers, we can use base ten to help us. You can draw the Tens as lines and the Ones as dots and cross them out when you do your working out:


Take away the Tens: 30-20=10

Then take away the Ones: $4-3=1$ e
$34-23=11$ -

## 2. Now you try:

Cross out the base ten to work out the answers to these subtractions:
a) $46-\mathbf{2 3}=$

b) $97-45=$

3. Draw your own base 10 lines and dots to solve these subtraction number sentences (only draw the bigger number and cross out the smaller amount):
a) $38-14=$
b) $41-20=$
c) $59-33=$
d) $64-41=$
e) $87-55=$

## Task: You are going to be solving word problems involving subtraction

Success Criteria:

1. Year $\mathbf{2 s}$, refresh your memory of subtracting by counting back on a number line
2. Year 3s, refresh your memory of subtracting using column method

## Model: 1. In Year 2 we use number lines to subtract

 numbers when we can't do the calculation in our heads. These numbers cross a ten, which makes it harder to do mentally: $24-16=8$> Partition the number that you are adding (e.g. $24-\mathbf{1 6}=$ ) into tens and ones  Start a number line from the first number (e.g. $\mathbf{2 4}-16=$ )

Make your tens jumps (e.g. $24+16=$ one jump of ten back from 24) and mark the numbers on the number line


Make your ones jumps (e.g. $24+16=$ six jumps of one from 14) and mark the number on the number line - this is your answer!
2. In Year 3 we use column subtraction to take away numbers when we can't do the calculation in our heads:


Write the larger number on top of the smaller number, in their correct place value columns (e.g. Tens and Units)


Always begin by subtracting the Units first.

We cannot do 4-6, so we exchange a Ten into the Units, leaving one fewer Ten. Now we can do $14-6=8$.


Next subtract the numbers in the Tens column. 1 $1=0$ lots of ten. You do not normally need to write the 0 in the Tens column.
Your answer to
24-16 = 8

| Task 1 |
| :--- |
| Practice |
| Year 2s use a number line and |

Year 3s use column method to solve these subtraction calculations:
a) There were 60 children in Year 2. 27 children had packed lunch. How many children had school dinners?
b) There were 42 bananas for playtime snacks. 26 children took a banana to eat. How many bananas were left?
c) Kaya gave Cassie 78 counters to use in a Maths lesson. Cassie accidentally dropped them. There were 39 counters left in the bowl, how many were on the floor?
d) Cherelle won $£ 95$ in the school raffle but she owed Oliver $£ 38$. How much money did Cherelle have left after paying Oliver back?

## Practice

Year 3s use column method to answer these addition and subtraction calculations:
a) Sarah went to the cinema.

There were 70 seats altogether.
34 adults and 17 children went to see the film. How many empty seats were there?
b) There were 60 children in Year
3. Half the children went on a school trip. 13 of the remaining children chose to play outside, while the rest stayed in to do an art project. How many Year 3s did the art project?
c) Calvin counted 132 ladybirds in the school garden. It started to rain and 74 ladybirds flew away. How many ladybirds were left in the garden?
d) Juliet would like to buy a new bike costing $£ 286$. She has already saved $£ 109$. Her friend then gave her a voucher worth $£ 28$. How much more money does Juliet need to buy the bike?


Who is correct? Explain how you know.
6b. Sara and Fred are solving 61-39.


Who is correct? Explain how you know.
7b. Sam has calculated seventy subtract forty-eight. Her calculation is below.


What mistake has she made?

## Problem solving

5a. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


5b. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.


8b. Using the digit cards below, create 3 different 2-digit subtraction that includes an exchange.



## Challenge

1. Danny and Greg go to the opening of a new toy shop.

Danny has $£ 623$ in his savings account and he wants to treat himself to a new toy. How much money would he have left if he bought each of the toys below?


Greg has $£ 114$ left over from his birthday money.
He buys a toy and is left with more than $£ 49$ but less than $£ 67$.

Which toy could he have bought? Find all the possibilities by subtracting each price from his total.

