## MONEY - DAY 4

L.O: I am able to use the four operations to solve money word problems

## Success Criteria

$\checkmark$ I can use pictorial representations, like number lines and bar models, and mental strategies to use the four operations to solve money word problems.
$\checkmark$ I can explain my reasoning when using the four operations to solve money word problems.

## Starter

Solve the word problems below.

Ruth has been saving money. She saved $£ 9$ last week and has saved another $£ 3$ this week.
How much has she saved in total?

Jamal left the house with $£ 19$.
He spent $£ 7$ on lunch.
How much money does he have left after buying lunch?

## What's the same? What's different?

 Explain your answer.
## Answer...

Solve the word problems below.

Ruth has been saving money. She saved $£ 9$ last week and has saved another $£ 3$ this week.
How much has she saved in total?

Jamal left the house with $£ 19$.
He spent $£ 7$ on lunch.
How much money does he have left after buying lunch?

## What's the same? What's different? Explain your answer.

The results to both calculations is $£ 12$. However, Ruth’s calculation is addition
$(£ 9+£ 3=£ 12)$, whereas Jamal's is a subtraction calculation (£19, £7 = £12).

## Use the bar model provided to solve the word problem below.

Ruth buys a pizza for $£ 11$ and spends $£ 3$ on an orange juice. How much does she spend in total?


## Answer...

Ruth buys a pizza for $£ 11$ and spends $£ 3$ on an orange juice. How much does she spend in total?

| $£ 14$ |  |
| :---: | :---: |
| $£ 11$ | $£ 3$ |

## Use the bar model provided to solve the word problem below.

Jamal buys a burger for $£ 9$ and spends $£ 6$ on a milkshake. How much does he spend in total?


## Answer...

Jamal buys a burger for $£ 9$ and spends $£ 6$ on a milkshake.
How much does he spend in total?


## Use the bar model provided to solve the word problem below.

Yasmin buys a sandwich for $£ 8$ and spends $£ 5$ on a bowl of soup.
How much does she spend in total?


## Answer...

Yasmin buys a sandwich for $£ 8$ and spends $£ 5$ on a bowl of soup.
How much does she spend in total?

| $£ 13$ |  |
| :--- | :--- |
| $£ 8$ | $£ 5$ |

## Use the bar model provided to solve the word problem below.

Jamal has $£ 15$. He spends $£ 4$ on a ticket to watch a movie. How much money does he have left?


## Answer...

Jamal has $£ 15$. He spends $£ 4$ on a ticket to watch a movie. How much money does he have left?


## Use the bar model provided to solve the word problem below.

Yasmin has $£ 14$. She spends $£ 11$ on a new pair of sandals. How much money does she have left?


## Answer...

Yasmin has $£ 14$. She spends $£ 11$ on a new pair of sandals. How much money does she have left?

| $£ 14$ |  |
| :--- | :--- |
| $\underline{£ 3}$ | $£ 11$ |

## Use the bar model provided to solve the word problem below.

Chen has $£ 17$. He spends $£ 9$ on a board game. How much money does he have left?


## Answer...

Chen has $£ 17$. He spends $£ 9$ on a board game. How much money does he have left?

| $£ 17$ |  |
| :--- | ---: |
| $\underline{\underline{£ 8}}$ | $£ 9$ |

## Use the bar model provided to solve the word problem below.

James buys five tickets for a football game for $£ 10$ each. How much does he spend in total?


## Answer...

James buys five tickets for a football game for $£ 10$ each. How much does he spend in total?

| $£ 50$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $£ 10$ | $£ 10$ | $£ 10$ | $£ 10$ | $£ 10$ |

## Use the bar model provided to solve the word problem below.

Ruth sells three cakes for $£ 11$ each.
How much money does she make in sales in total?


## Answer...

Ruth sells three cakes for $£ 11$ each.
How much money does she make in sales in total?

| $£ 33$ |  |  |
| :--- | :--- | :--- |
| $£ 11$ | $£ 11$ | $£ 11$ |

## Use the bar model provided to solve the word problem below.

Ahmed shares $£ 44$ equally between himself and his three brothers.
How much money do each of the boys get to keep?


## Answer...

Ahmed shares $£ 44$ equally between himself and his three brothers.

How much money do each of the boys get to keep?

| $£ 44$ |  |  |  |
| :--- | :--- | :--- | :--- |
| $\underline{£ 11}$ | $\underline{£ 11}$ | $\underline{£ 11}$ | $\underline{£ 11}$ |

## Use the bar model provided to solve the word problem below.

Eve shares $£ 36$ equally between herself and her two sisters. How much money do each of the girls get to keep?


## Answer...

Eve shares $£ 36$ equally between herself and her two sisters. How much money do each of the girls get to keep?

| $£ 36$ |  |  |
| :--- | :--- | :--- |
| $\underline{£ 12}$ | $\underline{£ 12}$ | $\underline{£ 12}$ |

## Activity

Ruth says, "To calculate $£ 14.70$ and $£ 43.50$, I start by adding the pound amounts together, making a sub-total of $£ 57$. I then add together the pence amount together, making a subtotal of $£ 1.20$. I then add the two sub-totals together to make the total amount, which is $£ 58.20$."

## Use Ruth's strategy to solve:

a) $£ 23.90+£ 21.20=$
b) $£ 36.40+£ 22.90=$
c) $£ 35.85+£ 42.90=$

## Answer...

Ruth says, "To calculate $£ 14.70$ and $£ 43.50$, I start by adding the pound amounts together, making a sub-total of $£ 57$. I then add together the pence amount together, making a subtotal of $£ 1.20$. I then add the two sub-totals together to make the total amount, which is $£ 58.20$."
Use Ruth's strategy to solve:
a) $£ 23.90+£ 21.20=£ 45.10$
b) $£ 36.40+£ 22.90=£ 59.30$
c) $£ 35.85+£ 42.90=\underline{£ 78.75}$

## Use a number line to help you find the difference between $£ 24.50$ and $£ 35.30$.

Use a number line to help you find the difference between $£ 24.50$ and $£ 35.30$.


## Answer...

Use a number line to help you find the difference between $£ 24.50$ and $£ 35.30$.


Use a number line to help you find the difference between $£ 23.30$ and $£ 37.15$.


## Answer...



## Activity

A sporting goods website sells the following items:


Jamal buys a basketball net, some shoes and a basketball jersey.
He pays with a $£ 50$ note.
How much change does he get back? Explain your answer.

## Answer...

A sporting goods website sells the following items:


Jamal buys a basketball net, some shoes and a basketball jersey.
He pays with a $£ 50$ note.
How much change does he get back? Explain your answer.

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He spends £24.99 + £9.20 + £4.50 = £38.69.
So, he gets £50-£38.69 = £11.31 back in change.
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## Activity

A sporting goods website sells the following items:


Ruth buys four basketball nets and uses a $£ 5$ off voucher.

How much money does she need to spend to pay the rest of the balance?

Explain your answer.

## Answer...

A sporting goods website sells the following items:


Ruth buys four basketball nets and uses a $£ 5$ off voucher.

How much money does she need to spend to pay the rest of the balance?
$4 \times £ 6.40=£ 25.60$
$£ 25.60-£ 5=\underline{£ 20.60}$

## Evaluation

To find the difference between the price of a small pot of honey, $£ 4.89$ and a large pot of honey, £11.35,
I add them together.

Do you agree?
Explain your answer.

## Answer...



No, I do not agree.
Astrobee will find out the combined price of a small pot and a large pot of honey. Astrobee needs to subtract or find the difference (£6.46).

