

# Lesson 10 – Measurement: Money – Two-step Problems

**NC Objective:**

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

**Resources needed:**

Differentiated Sheets  
Teaching Slides

**Vocabulary:**

Addition, subtraction, calculation, bar model

Children draw together all of the skills they have used in this block and consolidate their previous addition and subtraction learning.

Children may need some scaffolding to see the different steps.

Bar modeling is really useful to see the parts and wholes, and supports children in choosing the correct calculation.

**Key Questions:**

Where does the £ \_\_\_ go in the bar model?

How can you find the total?

Here is a one step problem. Can you think of a second step?

Can you write your own step word problem?

Did you use a concrete or pictorial representation to help you?

★ Working Towards

★★ Working Within

★★★ Greater Depth

**Two-step problems** Fluency & Precision 2

Solve the two-step problems.

Eoin has 5p in her piggy bank. Her mum gives her 10p more. Eoin then buys a lolly for 2p. How much money has she got left?	Zach has 4 pence in his piggy bank. His aunt gives him 3p more to put in. Zach then loses 2p. How much money has he got left?
Malachi has three coins. He spends three pence. How much does he have left?	Tia has these coins. She spends five pence. How much does she have left?
Rosie buys one cucumber and one onion. She pays with a 20p coin. How much change should she receive?	Rosie buys one rose and one daisy. She pays with a £5 note. How much change should she receive?

**Two-step problems** Fluency & Precision 2

Solve the two-step problems.

Eoin has 25p in her piggy bank. Her mum gives her 20p more. Eoin then buys a lolly for 30p. How much money has she got left?	Zach has 54 pence in his piggy bank. His aunt gives him 32p more to put in. Zach then loses 20p. How much money has he got left?
Malachi has three coins. He spends 39p on a pencil. How much does he have left?	Tia has these coins. She spends thirty-one pence. How much does she have left?
Rosie buys one cucumber and one onion. She pays with a £1 coin. How much change should she receive?	Rosie buys one rose and one daisy. She pays with a £20 note. How much change should she receive?

**Two-step problems** Fluency & Precision 2

Solve the two-step problems.

Eoin has £1 and 15p in her piggy bank. Her mum gives her 80p more. Eoin then buys a lolly for 90p. How much money has she got left?	Zach has £2 and 54 pence in his piggy bank. His aunt gives him £1 and 32p more to put in. Zach then loses 80p. How much money has he got left?
Malachi has these coins. He spends nineteen pence. How much does he have left?	Tia has these coins. She spends fifty pence. How much does she have left?
Rosie buys two cucumbers and two onions. She pays with a £1 coin. How much change should she receive?	Rosie buys three roses and two daisies. She pays with a £50 note. How much change should she receive?

**Two-step problems** Fluency & Precision 2

Solve the two-step problems.

Eoin has 5p in her piggy bank. Her mum gives her 10p more. Eoin then buys a lolly for 2p. How much money has she got left?	Zach has 4 pence in his piggy bank. His aunt gives him 3p more to put in. Zach then loses 2p. How much money has he got left?
Malachi has three coins. He spends three pence. How much does he have left?	Tia has these coins. She spends five pence. How much does she have left?
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Rosie buys two cucumbers and two onions. She pays with a £1 coin. How much change should she receive?	Rosie buys three roses and two daisies. She pays with a £50 note. How much change should she receive?

Children solve two step problems using smaller amounts of money/values.

Children solve two step problems using greater amounts of money/values.

Children solve complex word problems using a mix of pounds and pence crossing over to the next pounds.

## Reasoning & Problem Solving

**Two-step Problems** Reasoning & Problem Solving 2

 Leanna finds a 10 p coin. She puts it with her other two 20 p coins. Does Leanna have enough to buy the t-shirt? Explain your answer.	Eoin has 70 pence. She bought a pencil for 60 p and wants to buy scissors. Scissors: 20 p. The shopkeeper will not sell her the scissors. Why?
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**Two-step Problems** Reasoning & Problem Solving 2

 Leanna finds a 50 p coin. She puts it with her other five 5 p coins. Does Leanna have enough to buy the t-shirt? Explain your answer.	Eoin has 70 pence. She bought a pencil for 55 p and wants to buy scissors. Scissors: 20 p. Will the shopkeeper sell her the scissors? Explain your answer.
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**Two-step Problems** Reasoning & Problem Solving 2

 Leanna finds a 50 p coin. She puts it with her other five 5 p coins and three copper coins. What could the copper coins be? Does Leanna have enough to buy the t-shirt? Explain your answer.	Eoin has 70 pence. She bought a pencil for 30 p and rubber for 25 p and wants to buy scissors. Scissors: 20 p. The shopkeeper will not sell her the scissors. Why?
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Solve the two-step problems.



Esin has 5p in her piggy bank.  
Her mum gives her 10p more.  
Esin then buys a lolly for 2p.

How much money has she got left?

Zach has 4 pence in his piggy bank.  
His aunt gives him 3p more to put in.



Zach then loses 2p.  
How much money has he got left?

Malachi has these coins.



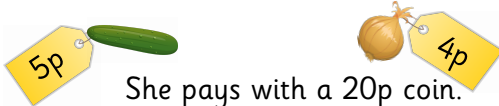
He spends three pence.  
How much does he have left?

Tia has these coins.



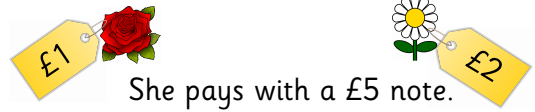
She spends five pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a 20p coin.  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £5 note.  
How much change should she receive?

Solve the two-step problems.



Esin has 5p in her piggy bank.  
Her mum gives her 10p more.  
Esin then buys a lolly for 2p.

How much money has she got left?

Zach has 4 pence in his piggy bank.  
His aunt gives him 3p more to put in.



Zach then loses 2p.  
How much money has he got left?

Malachi has these coins.



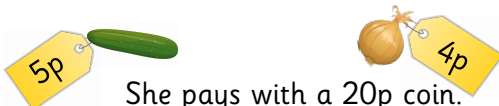
He spends three pence.  
How much does he have left?

Tia has these coins.



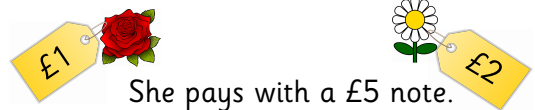
She spends five pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a 20p coin.  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £5 note.  
How much change should she receive?

Solve the two-step problems.



Esin has 5p in her piggy bank.  
Her mum gives her 10p more.  
Esin then buys a lolly for 2p.

How much money has she got left? **13p**

Zach has 4 pence in his piggy bank.  
His aunt gives him 3p more to put in.

**5p** Zach then loses 2p.  
How much money has he got left?



Malachi has these coins.



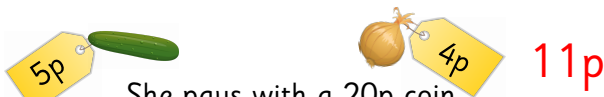
He spends three pence. **4p**  
How much does he have left?

Tia has these coins.



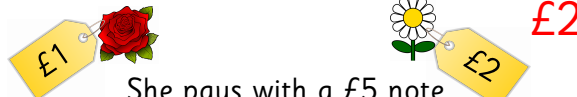
**6p** She spends five pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a 20p coin. **11p**  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £5 note. **£2**  
How much change should she receive?

Solve the two-step problems.



Esin has 5p in her piggy bank.  
Her mum gives her 10p more.  
Esin then buys a lolly for 2p.

How much money has she got left? **13p**

Zach has 4 pence in his piggy bank.  
His aunt gives him 3p more to put in.

**5p** Zach then loses 2p.  
How much money has he got left?



Malachi has these coins.



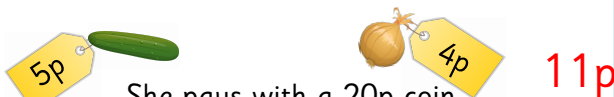
He spends three pence. **4p**  
How much does he have left?

Tia has these coins.



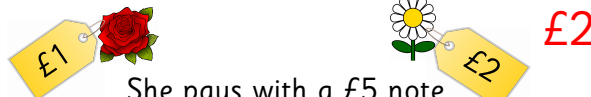
**6p** She spends five pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a 20p coin. **11p**  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £5 note. **£2**  
How much change should she receive?



Solve the two-step problems.

Esin has 25p in her piggy bank.  
Her mum gives her 20p more.  
Esin then buys a lolly for 30p.



How much money has she got left?

Zach has 54 pence in his piggy bank.  
His aunt gives him 32p more to put in.



Zach then loses 20p.  
How much money has he got left?

Malachi has these coins.



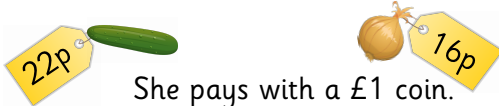
He spends fifteen pence.  
How much does he have left?

Tia has these coins.



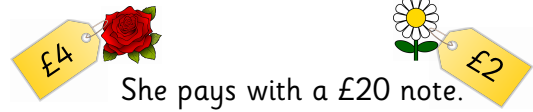
She spends thirty-two pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a £1 coin.  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £20 note.  
How much change should she receive?



Solve the two-step problems.

Esin has 25p in her piggy bank.  
Her mum gives her 20p more.  
Esin then buys a lolly for 30p.



How much money has she got left?

Zach has 54 pence in his piggy bank.  
His aunt gives him 32p more to put in.



Zach then loses 20p.  
How much money has he got left?

Malachi has these coins.



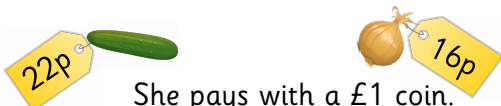
He spends fifteen pence.  
How much does he have left?

Tia has these coins.



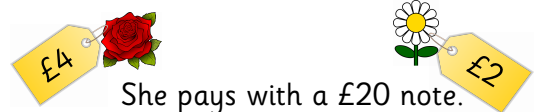
She spends thirty-two pence.  
How much does she have left?

Rosie buys one cucumber and one onion.



She pays with a £1 coin.  
How much change should she receive?

Rosie buys one rose and one daisy.



She pays with a £20 note.  
How much change should she receive?



Solve the two-step problems.

Esin has 25p in her piggy bank.  
Her mum gives her 20p more.  
Esin then buys a lolly for 30p.



How much money has she got left? **15p**

Zach has 54 pence in his piggy bank.  
His aunt gives him 32p more to put in.



Zach then loses 20p.  
How much money has he got left? **66p**

Malachi has these coins.



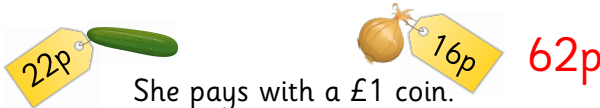
He spends fifteen pence.  
How much does he have left? **12p**

Tia has these coins.



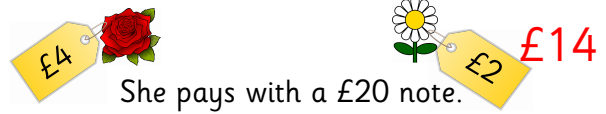
She spends thirty-two pence.  
How much does she have left? **13p**

Rosie buys one cucumber and one onion.



She pays with a £1 coin.  
How much change should she receive? **62p**

Rosie buys one rose and one daisy.



She pays with a £20 note.  
How much change should she receive? **£14**



Solve the two-step problems.

Esin has 25p in her piggy bank.  
Her mum gives her 20p more.  
Esin then buys a lolly for 30p.



How much money has she got left? **15p**

Zach has 54 pence in his piggy bank.  
His aunt gives him 32p more to put in.



Zach then loses 20p.  
How much money has he got left? **66p**

Malachi has these coins.



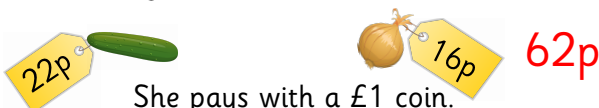
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How much does he have left? **12p**

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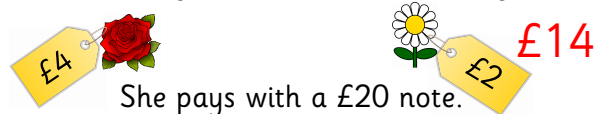
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How much change should she receive? **62p**

Rosie buys one rose and one daisy.



She pays with a £20 note.  
How much change should she receive? **£14**



Solve the two-step problems.

Esin has £1 and 15p in her piggy bank.  
Her mum gives her 68p more.  
Esin then buys a lolly for 99p.



How much money has she got left?

Zach has £2 and 54 pence in his piggy bank.  
His aunt gives him £1 and 32p more to put in.



Zach then loses 88p.  
How much money has he got left?

Malachi has these coins.



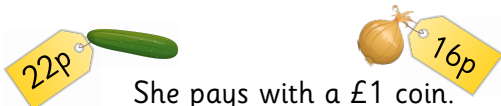
He spends nineteen pence.  
How much does he have left?

Tia has these coins.



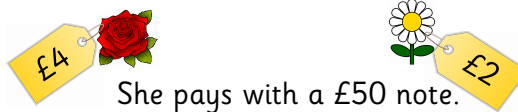
She spends fifty pence.  
How much does she have left?

Rosie buys two cucumbers and two onions.



She pays with a £1 coin.  
How much change should she receive?

Rosie buys three roses and two daisies.



She pays with a £50 note.  
How much change should she receive?



Solve the two-step problems.

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Her mum gives her 68p more.  
Esin then buys a lolly for 99p.



How much money has she got left?

Zach has £2 and 54 pence in his piggy bank.  
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Zach then loses 88p.  
How much money has he got left?

Malachi has these coins.



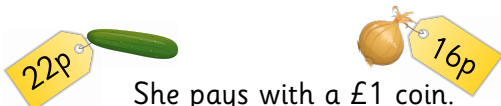
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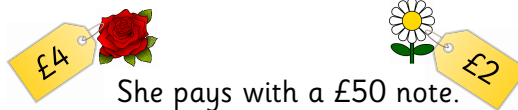
She spends fifty pence.  
How much does she have left?

Rosie buys two cucumbers and two onions.



She pays with a £1 coin.  
How much change should she receive?

Rosie buys three roses and two daisies.



She pays with a £50 note.  
How much change should she receive?



Solve the two-step problems.

Esin has £1 and 15p in her piggy bank.  
Her mum gives her 68p more.  
Esin then buys a lolly for 99p.



How much money has she got left?

**84p**

Zach has £2 and 54 pence in his piggy bank.  
His aunt gives him £1 and 32p more to put in.

**£2 and 20p**

Zach then loses 88p.

How much money has he got left?



Malachi has these coins.



He spends nineteen pence.  
How much does he have left?

**£2 and 23p**

Tia has these coins.



She spends fifty pence.  
How much does she have left?

**85p**

Rosie buys two cucumbers and two onions.



She pays with a £1 coin.

How much change should she receive?

**24p**

Rosie buys three roses and two daisies.



She pays with a £50 note.

How much change should she receive?

**£34**

Solve the two-step problems.

Esin has £1 and 15p in her piggy bank.  
Her mum gives her 68p more.  
Esin then buys a lolly for 99p.



How much money has she got left?

**84p**

Zach has £2 and 54 pence in his piggy bank.  
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**£2 and 20p**

Zach then loses 88p.

How much money has he got left?



Malachi has these coins.



He spends nineteen pence.  
How much does he have left?

**£2 and 23p**

Tia has these coins.



She spends fifty pence.  
How much does she have left?

**85p**

Rosie buys two cucumbers and two onions.



She pays with a £1 coin.

How much change should she receive?

**24p**

Rosie buys three roses and two daisies.



She pays with a £50 note.

How much change should she receive?

**£34**



Leanna finds a 10 p coin.

She puts it with her other two 20 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.



Esin has 70 pence.

She bought a pencil for 60 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.

Why?



Leanna finds a 10 p coin.

She puts it with her other two 20 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.



Esin has 70 pence.

She bought a pencil for 60 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.

Why?





Leanna finds a 10 p coin.

She puts it with her other two 20 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.

No, because she has only  
 $50 \text{ p} = 10 \text{ p} + 2 \times 20 \text{ p}$   
 $50 \text{ p} < 80 \text{ p}$



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Esin has 70 pence.

She bought a pencil for 60 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.

Why?

$70 \text{ p} - 60 \text{ p} = 10 \text{ p}$   
 $10 \text{ p} < 20 \text{ p}$   
 She doesn't have enough money to buy the scissors.



Leanna finds a 10 p coin.

She puts it with her other two 20 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.

No, because she has only  
 $50 \text{ p} = 10 \text{ p} + 2 \times 20 \text{ p}$   
 $50 \text{ p} < 80 \text{ p}$



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Esin has 70 pence.

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Scissors: 20 p

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Why?

$70 \text{ p} - 60 \text{ p} = 10 \text{ p}$   
 $10 \text{ p} < 20 \text{ p}$   
 She doesn't have enough money to buy the scissors.





Leanna finds a 50 p coin.

She puts it with her other five 5 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.



Esin has 70 pence.

She bought a pencil for 55 p and wants to buy scissors.



Scissors: 20 p

Will the shopkeeper sell her the scissors?

Explain your answer.



Leanna finds a 50 p coin.

She puts it with her other five 5 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.



Esin has 70 pence.

She bought a pencil for 55 p and wants to buy scissors.



Scissors: 20 p

Will the shopkeeper sell her the scissors?

Explain your answer.





Leanna finds a 50 p coin.

She puts it with her other five 5 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.

No, because she has only  
 $75 \text{ p} = 50 \text{ p} + 5 \times 5 \text{ p}$   
 $75 \text{ p} < 80 \text{ p}$



Esin has 70 pence.

She bought a pencil for 55 p and wants to buy scissors.



Scissors: 20 p

Will the shopkeeper sell her the scissors?

Explain your answer.

$70 \text{ p} - 55 \text{ p} = 15 \text{ p}$   
 $15 \text{ p} < 20 \text{ p}$   
 The shopkeeper will not sell her the scissors because she doesn't have enough money to buy it.



Leanna finds a 50 p coin.

She puts it with her other five 5 p coins.

Does Leanna have enough to buy the t-shirt?

Explain your answer.

No, because she has only  
 $75 \text{ p} = 50 \text{ p} + 5 \times 5 \text{ p}$   
 $75 \text{ p} < 80 \text{ p}$



Esin has 70 pence.

She bought a pencil for 55 p and wants to buy scissors.



Scissors: 20 p

Will the shopkeeper sell her the scissors?

Explain your answer.

$70 \text{ p} - 55 \text{ p} = 15 \text{ p}$   
 $15 \text{ p} < 20 \text{ p}$   
 The shopkeeper will not sell her the scissors because she doesn't have enough money to buy it.





Leanna finds a 50 p coin.

She puts it with her other five 5 p coins and three copper coins.

What could the copper coins be?

Does Leanna have enough to buy the t-shirt?

Explain your answer.



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Esin has 70 pence.

She bought a pencil for 30 p and rubber for 25 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.

Why?



Leanna finds a 50 p coin.

She puts it with her other five 5 p coins and three copper coins.

What could the copper coins be?

Does Leanna have enough to buy the t-shirt?

Explain your answer.



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Esin has 70 pence.

She bought a pencil for 30 p and rubber for 25 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.

Why?





Leanna finds a 50 p coin.

She puts it with her other five 5 p coins and three copper coins.

What could the copper coins be?

Does Leanna have enough to buy the t-shirt?

Explain your answer.

Without the copper coins, she has 75 p.  
To buy the t-shirt the copper coins must be 1 p, 2 p, 2 p or 2 p, 2 p, 2p.



Esin has 70 pence.

She bought a pencil for 30 p and rubber for 25 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.



Why?

$30\text{ p} + 25\text{ p} = 55\text{ p}$ ,  
so her change is  $70\text{ p} - 55\text{ p} = 15\text{ p}$   
 $15\text{ p} < 20\text{ p}$   
She doesn't have enough money to buy the scissors.



Leanna finds a 50 p coin.

She puts it with her other five 5 p coins and three copper coins.

What could the copper coins be?

Does Leanna have enough to buy the t-shirt?

Explain your answer.

Without the copper coins, she has 75 p.  
To buy the t-shirt the copper coins must be 1 p, 2 p, 2 p or 2 p, 2 p, 2p.



Esin has 70 pence.

She bought a pencil for 30 p and rubber for 25 p and wants to buy scissors.



Scissors: 20 p

The shopkeeper will not sell her the scissors.



Why?

$30\text{ p} + 25\text{ p} = 55\text{ p}$ ,  
so her change is  $70\text{ p} - 55\text{ p} = 15\text{ p}$   
 $15\text{ p} < 20\text{ p}$   
She doesn't have enough money to buy the scissors.