# Spring Block 1 Money



© White Rose Maths 2022

# Small steps

Step 1	Count money – pence
Step 2	Count money – pounds (notes and coins)
Step 3	Count money – pounds and pence
Step 4	Choose notes and coins
Step 5	Make the same amount
Step 6	Compare amounts of money
Step 7	Calculate with money
Step 8	Make a pound





# Small steps

Step 9	Find change
Step 10	Two-step problems





## **Count money – pence**



#### Notes and guidance

In this small step, children count money in pence. They should be able to recognise coins based on their real-life experience, as well as earlier learning in Year 1, but may need a quick recap on each coin and its value. They may need to be formally introduced to the term "worth" and its meaning in this context. Although children may have seen values written as, for example, "5p" meaning 5 pence, some might need to be explicitly introduced to this notation.

Children use their knowledge from place value and addition and subtraction to find the total value of a set of coins, with all answers being less than £1. They should be able to count up in 1ps, 2ps, 5ps and 10ps, and use related facts to count up in 20ps, as well as finding the total of a mixed set of coins.

Children do not need to convert between pounds and pence, so while they must be able to recognise a 50p coin, they do not need to count up in 50ps.

## Things to look out for

- Children may think that a bigger coin is greater in value, for example 2p is worth more than 5p.
- Children may simply count the number of coins, rather than consider their value.

## **Key questions**

- What is this coin worth?
- Which coin is worth more?
- How many \_\_\_\_\_ are there?
- What is the total value of \_\_\_\_\_ 1p/2p/5p/10p coins?
- How does counting in 2s help you to count in 20s?
- How much money is there altogether?
- Which coins did you count first?

#### **Possible sentence stems**

• There are \_\_\_\_\_p coins.

The total value of the coins is \_\_\_\_\_ p.

• There are \_\_\_\_\_ p coins and \_\_\_\_\_ p coins.

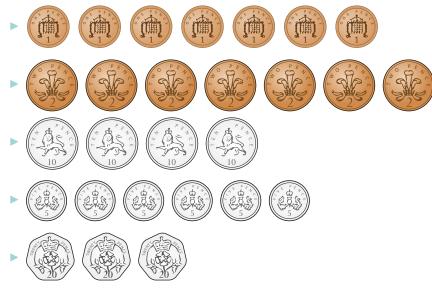
The total value of the coins is \_\_\_\_\_p.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

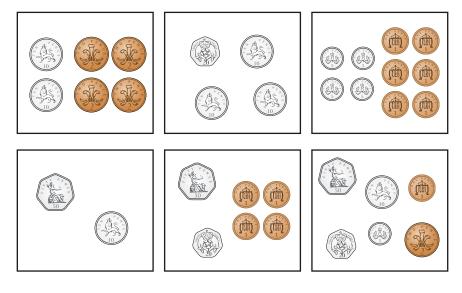
## **Count money – pence**

## **Key learning**

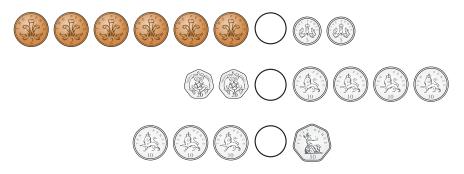
• Count the money.



• How much money is in each box?



• Write < , > or = to compare the money.



• Complete the sentences to count the money.



- There are \_\_\_\_\_10p coins.
  - The total value is \_\_\_\_\_p.
- ► There are \_\_\_\_\_1p coins.

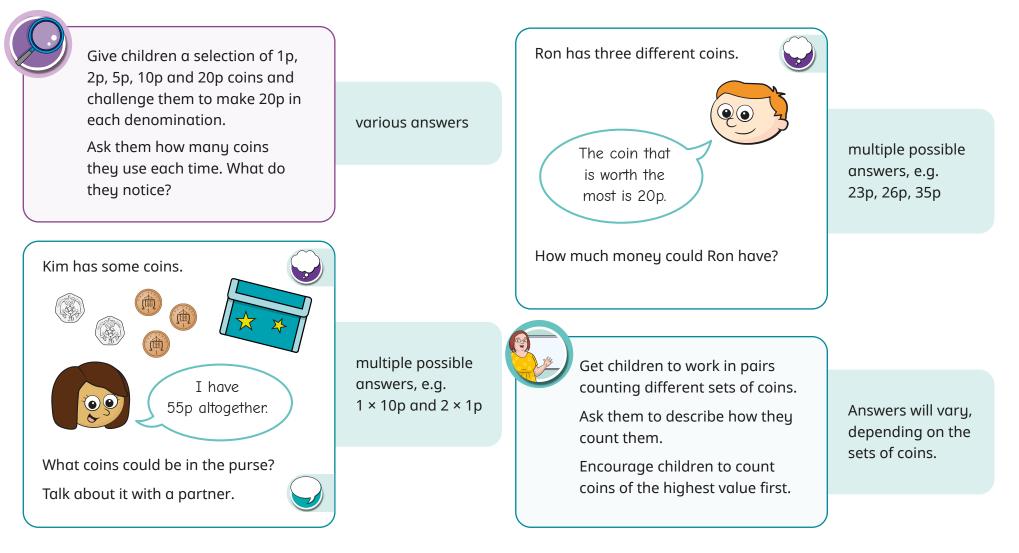
The total value is \_\_\_\_\_ p.

► There is \_\_\_\_\_p altogether.

White R©se Maths

## **Count money – pence**

#### White R@se Maths



# Count money – pounds (notes and coins)

#### Notes and guidance

In this small step, children count money in pounds. They should be able to recognise both notes and coins based on their real-life experience, as well as earlier learning in Year 1, but may need a quick recap on each note or coin and its value.

Although children may have seen values written as, for example, "£5", meaning 5 pounds, some might need to be explicitly introduced to this notation. Children use their knowledge from place value and addition and subtraction to find the total value of a set of notes and coins. All answers will be less than £100. They should be able to count up in £1s, £2s, £5s and £10s, and use related facts to count up in £20s, as well as being able to find the total of mixed sets of notes and coins.

Children do not need to count beyond 100, so while they must be able to recognise a £50 note and know that two £50 notes are £100, they do not need to go beyond this.

#### Things to look out for

- Children may think that coins are always pence.
- Children may forget to write "£" with their answer.
- Children may simply count the number of notes/coins, rather than consider their value.

#### **Key questions**

- What is this coin/note worth?
- Which coin/note is worth more?
- How many \_\_\_\_\_ are there?
- What is the total value of \_\_\_\_\_\_£1/£2 coins?
- What is the total value of \_\_\_\_\_\_£5/£10/£20/£50 notes?
- How much money is there altogether?
- Which did you count first?

#### **Possible sentence stems**

• There are \_\_\_\_\_ coins/notes.

The total value is £\_\_\_\_\_

• There are \_\_\_\_\_ coins/notes and \_\_\_\_\_ coins/notes.

The total value is £\_\_\_\_\_

#### **National Curriculum links**

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

White Rose Maths

# Count money – pounds (notes and coins)

## **Key learning**

• Count the money.



• Complete the sentences to count the money.



- There is \_\_\_\_\_ £50 note.
- The total value is £\_\_\_\_\_
- ► There are \_\_\_\_\_ £1 coins.

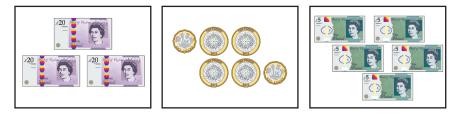
The total value is £ \_\_\_\_\_

► There is £ \_\_\_\_\_ altogether.

• Complete the bar models.



• Match the money to the correct total.

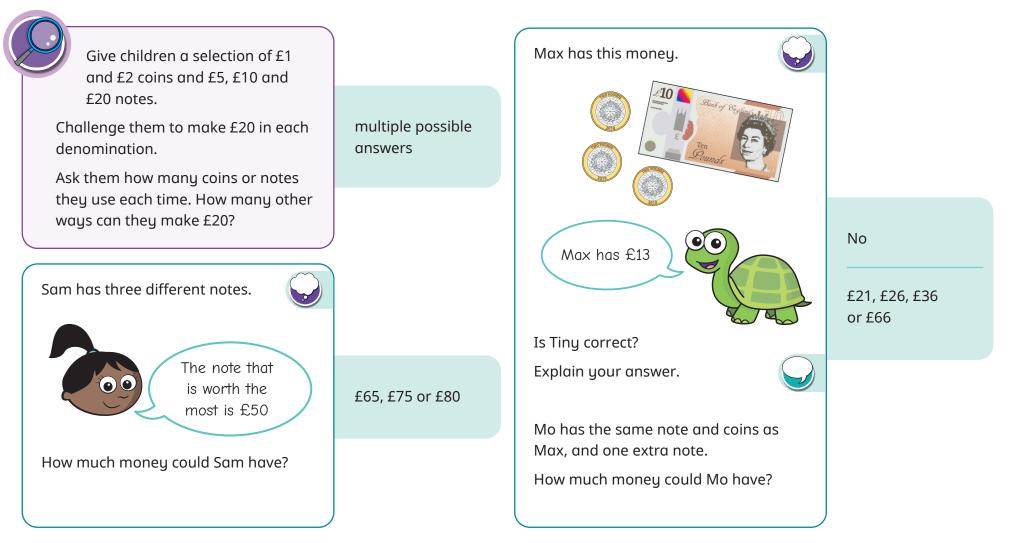




• How much money is in each box?



# Count money – pounds (notes and coins)





# Count money – pounds and pence

#### Notes and guidance

In this small step, children combine their learning from the previous two steps to count money in both pounds and pence. Decimal notation is not introduced in Key Stage 1, so children will represent amounts using "and", for example £5 and 30p, rather than £5.30

As the notation of "£" and "p" may have been new to children in the previous steps, they may need reminding of these to ensure that they are using them correctly.

Children will not count across £1, so the pence value will always be less than 100p. Also, as children do not go beyond 100 in Year 2, all the pound values will be less than £100

Encourage children to consider and count pounds and pence separately before combining them. It is important that they can interpret the values they have written down, for example reading "£5 and 30p" as "5 pounds and 30 pence".

#### **Key questions**

- What is this coin/note worth?
- Which coin/note is worth more?
- What is the total value of \_\_\_\_\_\_£ \_\_\_\_ notes/coins?
- What is the total value of \_\_\_\_\_ p coins?
- How much money is there altogether?

#### **Possible sentence stems**

- There are \_\_\_\_\_\_£ \_\_\_\_\_ coins/notes.
  - The total value of the coins/notes is £\_\_\_\_\_
- There are \_\_\_\_\_ p coins.

The total value of the coins is \_\_\_\_\_p.

• There is £ \_\_\_\_\_ and \_\_\_\_\_ p altogether.

#### Things to look out for

- Children may mix up pounds and pence.
- Children may simply count the number of notes/coins, rather than consider their value.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change



# Count money – pounds and pence

## **Key learning**

• Complete the sentences to count the money.



There are \_\_\_\_\_ £10 notes.

The total value is £ \_\_\_\_\_

▶ There are \_\_\_\_\_ 2p coins.

The total value is \_\_\_\_\_ p.

- ▶ There is £ \_\_\_\_\_ and \_\_\_\_\_ p altogether.
- How much money is there?





• How much money is there?

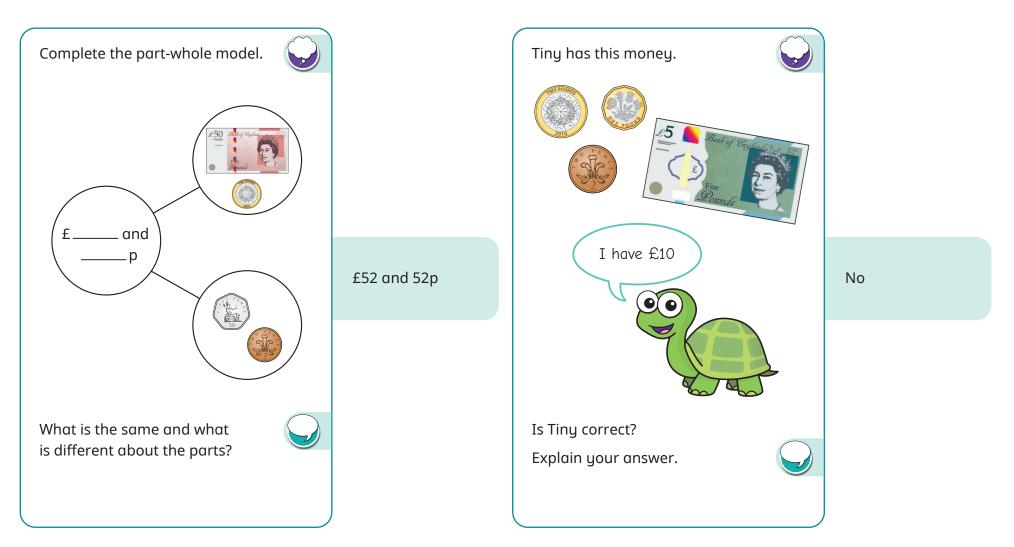




- Fill in the missing numbers to make the statements correct.
  - £10 + £5 + 50p = £ \_\_\_\_\_ and \_\_\_\_\_p
  - £20 + £2 + 10p + 10p + 2p = £ \_\_\_\_\_ and \_\_\_\_\_ p
  - £5 + £ \_\_\_\_\_ + 50p + 20p + 20p + 1p = £10 and \_\_\_\_\_ p



# Count money – pounds and pence





# **Choose notes and coins**



#### Notes and guidance

In this small step, children build on the learning from earlier in the block, choosing notes and coins to make a given amount. Children select notes and coins from a bigger set, reinforcing their learning on counting money as a method of checking their answers.

Initially, children focus on selecting pounds or selecting pence, explicitly focusing on notes and coins separately, before going on to choose both pounds and pence from a set of notes and coins. Children do not need to choose an amount where they need to combine pence to make a pound. Children should be stretched to consider whether there is more than one way of selecting the given amount from the money that they have. Alternatively, they could be given limitations, for example "Choose three coins that have a total of 25p."

## Things to look out for

- Children may confuse pounds and pence.
- Children may confuse the notation for pounds and pence.
- Children may select the number of coins, for example choosing any three coins for 3p, rather than considering value.

## **Key questions**

- How much money do you need?
   How much money have you got?
   How much more money do you need?
- How do you know you have made \_\_\_\_\_?
- Can you find another way to make the same amount?
- Does it matter if you count the pounds or pence first?
- Does swapping \_\_\_\_\_ for \_\_\_\_\_ change the total?

#### **Possible sentence stems**

- There are \_\_\_\_\_ £ \_\_\_\_ notes/coins.
  - There are \_\_\_\_\_p coins.

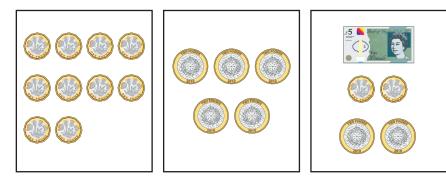
There is £\_\_\_\_\_ and \_\_\_\_\_ p in total.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

# **Choose notes and coins**

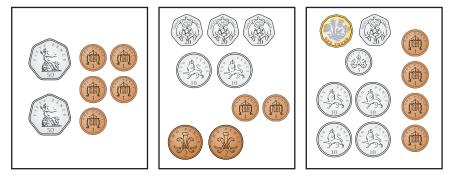
## **Key learning**

• Choose £6 from each box.



Compare answers with a partner.

• Choose 53p from each box.



Compare answers with a partner.

• Choose £2 and 56p.



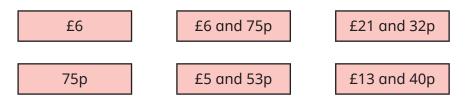
Can you choose different coins?

• Choose £45 and 18p.



Can you choose the same amount a different way?

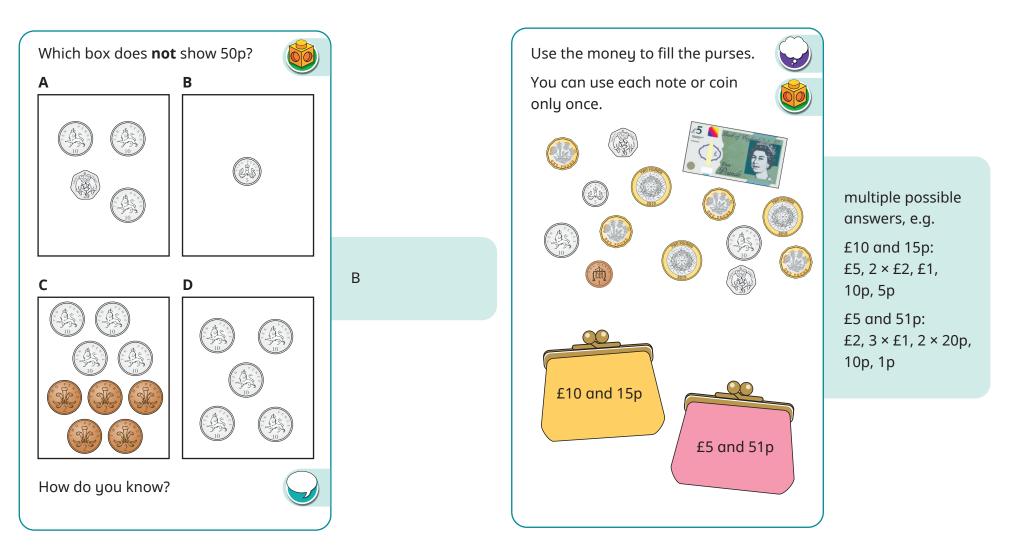
• Draw money to show each amount.



White R©se Maths

# Choose notes and coins





## Make the same amount



#### Notes and guidance

In this small step, children explore different ways of making the same amount. They may have had some experience of this earlier if there was more than one way to choose a given amount from a set of coins, but here they focus on it explicitly. As in the previous step, children are not required to count in pence to make a pound, as this will be looked at later.

This step follows a similar structure to the previous one, where children are first exposed to only pounds or only pence, before looking at examples that include both pounds and pence. When looking at such examples, it is useful to model a strategic approach where first the pounds are made and then the pence, to avoid children confusing the two.

Children could start by making the amount in one way, before swapping notes/coins for other notes/coins that make the same value. For example, they could swap a 20p coin for two 10p coins to make the same amount.

## Things to look out for

- Children may confuse pounds and pence.
- When swapping coins for others with the same value, children may not remove the coin they are swapping, so they no longer have the correct amount.

## **Key questions**

- Can you make the same amount a different way?
- How do you know the amount is the same?
- What can you swap a £20 note for to keep the amount the same?
- Can you swap any notes/coins to make the same amount?
- What is the fewest number of coins you can use to make \_\_\_\_\_?

#### **Possible sentence stems**

- One £ \_\_\_\_\_ note is worth the same as two £ \_\_\_\_\_ notes.
- One £ \_\_\_\_\_ coin is worth the same as two £ \_\_\_\_\_ coins.
- One \_\_\_\_\_ is worth the same as \_\_\_\_\_
- I know the amount is the same because ...

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

# Make the same amount

## **Key learning**

Match the amounts that are the same. 















Match the amounts that are the same. 





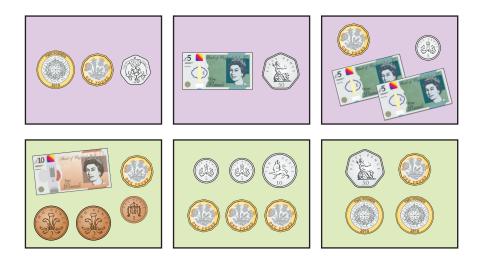








Match the amounts that are the same. 



Draw money so that each box has £12 and 35p. 





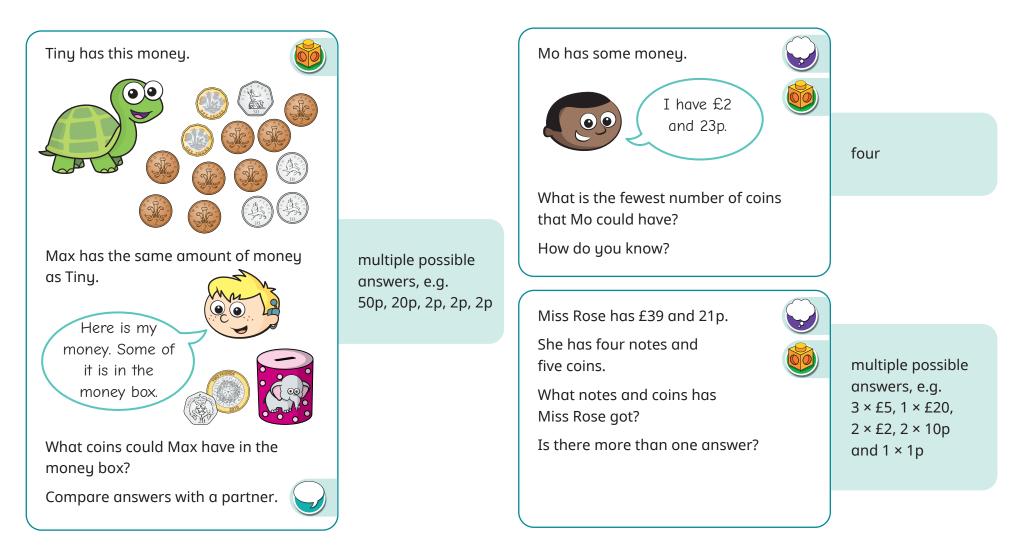
How many ways can you make £4 and 26p? Compare answers with a partner.



White Røse Maths

# Make the same amount

#### White Røse Maths



## **Compare amounts of money**



#### Notes and guidance

In this small step, children compare amounts of money using the language of "greater than", "less than", "most" and "least", together with the inequality symbols. As inequality symbols are often a sticking point for children, they may need a reminder of the meaning of each symbol before continuing with the step.

Children compare amounts of money that are made up of both pounds and pence, but they only need to focus on one of these, as the other will be the same. For example, they may compare £3 and 20p with £3 and 60p, where £3 is the constant, or compare £4 and 50p with £7 and 50p, where 50p is the constant. They should recognise that since one part is the same, they can just compare the other.

It is important that children know that £1 is worth more than 1p, so if they compare £3 with 3p, then they know that £3 is worth more.

#### **Key questions**

- Which is worth more, £1 or 1p? How do you know?
- How much money is there?
- If the number of pounds is the same, what can you compare?
- If the number of pence is the same, what can you compare?
- Which amount is the greatest/smallest? How do you know?
- Who has the least/most money? How do you know?

#### Possible sentence stems

- £3 and \_\_\_\_\_p is greater than £3 and \_\_\_\_\_p because ...
- £ \_\_\_\_\_ and 20p is less than £ \_\_\_\_\_ and 20p because ...
- I know that £ \_\_\_\_\_ and \_\_\_\_\_ p is greater/less than
   £ \_\_\_\_\_ and \_\_\_\_\_ p because ...

## Things to look out for

- Children may only compare the numerical values and not consider the units.
- Children may only consider the quantity of notes/coins rather than their value.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

# Compare amounts of money

## **Key learning**

• Which note is worth the most?



How do you know?

• Which coin is worth the least?



How do you know?

• Which is the greatest amount of money?



How do you know?

• Write < , > or = to compare the amounts.



• Write < , > or = to compare the amounts.

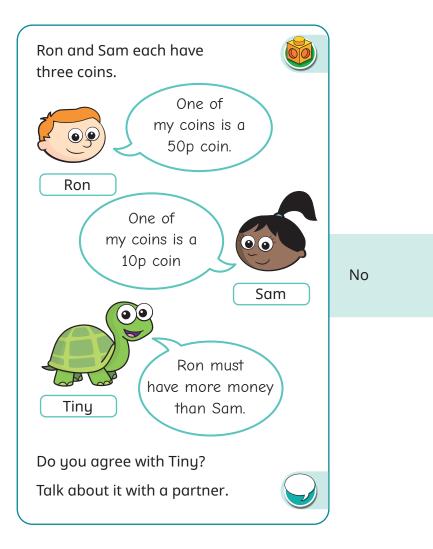


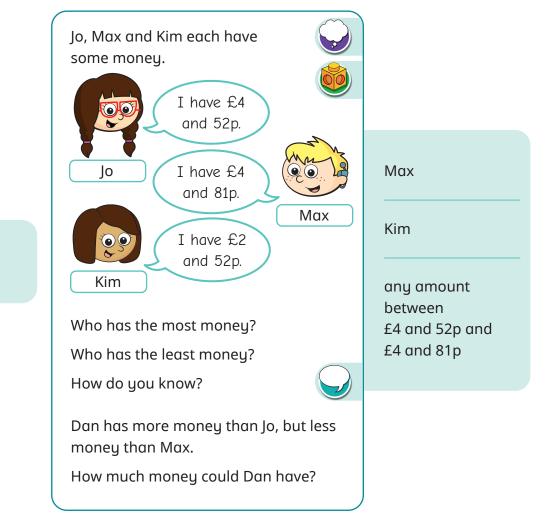
Mo and Kim have some money. Who has more money? Who has less money? How do you know? Kim



# **Compare amounts of money**

#### White Røse Maths





# **Calculate with money**



#### Notes and guidance

In this small step, children combine their learning from an earlier block on addition and subtraction with their new learning on money to perform calculations involving money. They need to be able to find the total cost or find the difference in prices.

As children have not converted between pounds and pence, none of the calculations will require an exchange from pence to pounds.

When finding the total, children should be encouraged to consider different methods such as counting on, partitioning and regrouping. When finding the difference, children should explore both counting on and counting back. They can compare and contrast methods to decide which one is more efficient.

## Things to look out for

- Children may add all the numbers rather than adding the pounds and pence separately, for example thinking that the total of £3 and 10p and £2 and 10p is £25 or 25p, because 3 + 10 + 2 + 10 = 25
- When finding the difference, the language in the question may confuse children. For example, when asked to find how much more somebody has, they may think they need to add because of the word "more".

## **Key questions**

- What does "total" mean?
- What does "difference" mean?
- How many pounds/pence are there altogether?
- How many more pounds/pence are there?
- How much more money does \_\_\_\_\_ need?

#### **Possible sentence stems**

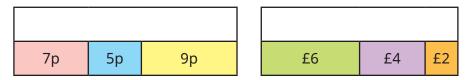
- £ \_\_\_\_\_ plus £ \_\_\_\_\_ is equal to £ \_\_\_\_\_
  - \_\_\_\_\_p plus \_\_\_\_\_p is equal to \_\_\_\_\_p.
  - £ \_\_\_\_\_ plus \_\_\_\_\_ p is equal to £ \_\_\_\_\_ and \_\_\_\_\_ p.
- The difference between £ \_\_\_\_\_ and £ \_\_\_\_\_ is £ \_\_\_\_\_
  - The difference between \_\_\_\_\_p and \_\_\_\_\_p is \_\_\_\_\_p.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

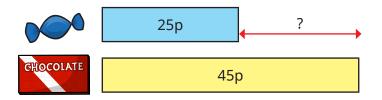
# **Calculate with money**

## **Key learning**

• Complete the bar models.



• How much more does the chocolate bar cost than the sweet?



• How much more money does Kay have than Ann?



• Mr Lee buys these two items.





£2

£5

How much does he spend?

- Ben buys a magazine and a carton of juice.
  - How much does Ben spend?

Fay buys a teddy and a magazine.

- How much does Fay spend?
- How much more does a teddy cost than a magazine?
- Jo has £2 and 15p.

Tom has £2 and 40p.

- How much money do they have altogether?
- How much more money does Tom have than Jo?

1 litre

£1

White R©se Maths

# **Calculate with money**

## **Reasoning and problem solving**

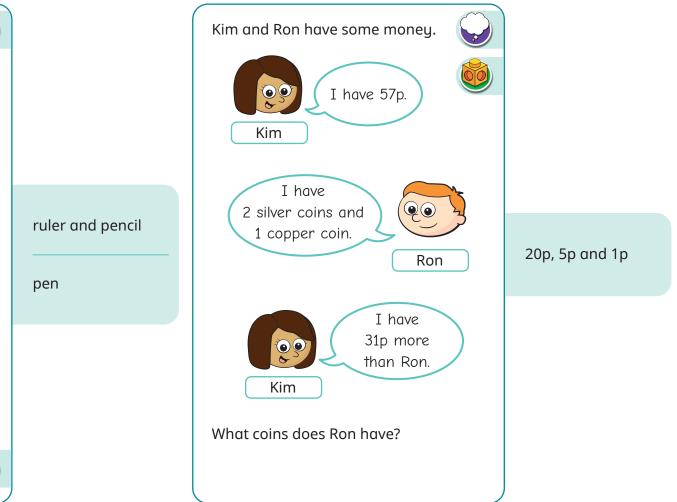
Here is a price list.				
	Item	Price		
	ruler	18p		
	pencil	32p		
	crayon	27p		
	pen	45p		
	glue	36p		

Sam buys two items for 50p.

What two items does she buy?

Mo buys two of the same item for 90p. What item did he buy two of?







# Make a pound



#### Notes and guidance

In this small step, children explore for the first time the equivalence of  $\pounds 1$  and 100p.

It is essential for children to understand that £1 is equal to 100p or that £1 is made up of 100 pence. Using this knowledge, they should be able to make £1 in different ways and using a variety of coins. This will support them later in the block when they work out change, as being able to make £1 in different ways will mean that children will find it easier to find change from £1

Children use their knowledge of bonds to 100 from earlier learning to support them, both working with tens and working with tens and ones. When working with just tens, children should know that, for example, 30 + 70 = 100, but should then realise that since there is not a 30p or 70p coin, this on its own cannot be used to make a pound.

As children do not go beyond 100, there is no need for them to know related facts for other whole pounds.

## Things to look out for

- Children may focus on using only multiples of the same coin to make £1, rather than combining different coins.
- Children may not use combinations of 1p or 2p coins and focus only on coins with a higher value.

#### **Key questions**

- How many pence are there in £1?
- Can you make £1 using \_\_\_\_\_p coins?
- Can you make £1 using different coins?
- How do you know you have £1?
- How do bonds to 100 help you make £1?
- 70 + 30 = 100, so can you make £1 using a 70p coin and a 30p coin? How do you know?

#### Possible sentence stems

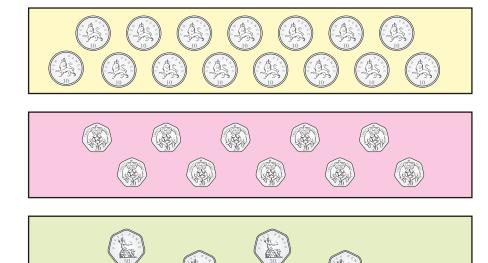
- One pound is equal to \_\_\_\_\_ pence.
- There are \_\_\_\_\_p coins in £1
- \_\_\_\_\_+ \_\_\_\_ = 100, so \_\_\_\_\_\_p + \_\_\_\_\_p = £1

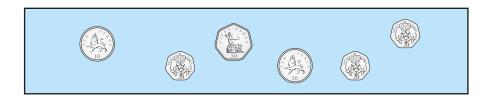
- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

# Make a pound

## **Key learning**

• For each set of money, choose coins to make £1







• Draw money so that each purse has £1





Complete the bar models. 

£1		£1		
30p			25p	

- Complete the additions.
  - ► 50p + \_\_\_\_ p = £1
    ► 10p + \_\_\_\_ p = £1
  - ▶ \_\_\_\_\_p + 55p = £1 ▶ £1 = \_\_\_\_p + 28p

White Røse Maths

## Make a pound

#### White R@se Maths

## **Reasoning and problem solving**



Ask children to make £1 using the same value of coin.

- only 50p coins
- only 20p coins
- only 10p coins
- only 5p coins
- only 2p coins
- only 1p coins

Ask them what patterns they can see.

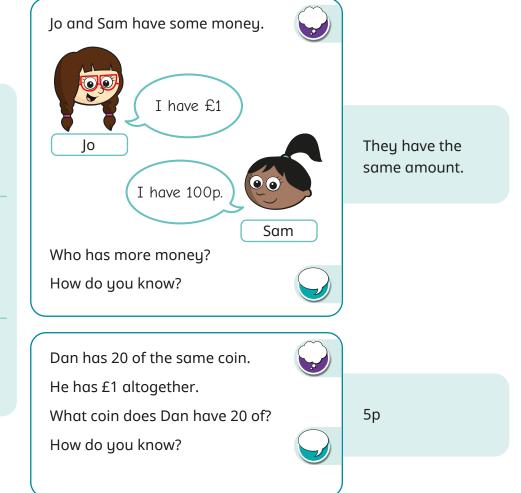
When children have established the relationship between coin value and number of coins, ask them to find the maximum and minimum number of coins they can use to make £1

Discuss what happens if they use different denominations rather than all the same. 50p: 2; 20p: 5; 10p: 10; 5p: 20; 2p: 50; 1p: 100

The greater the coin value, the fewer coins are needed.

100 1p coins

1 £1 coin



# **Find change**



The focus of this small step is on finding change from £1. Children explore a variety of different methods of calculating change. They could start by making £1 using different coins, building on the learning from the previous step, then remove the coins that are spent and count what is left. They could then go on to use more abstract methods, such as counting back and counting on, using a number line. When children are confident in calculating change from £1, they can explore finding change from other whole pounds.

The examples used should be as realistic as possible in terms of the amounts involved, for example finding change from £5 (a note that exists) versus finding change from £4 (which has no specific coin or note).

#### Things to look out for

- Children may not understand the meaning of the word "change" in this context, so this might need explaining.
- Children may give their answer in pounds rather than pence, because the amount they are finding change from is given in pounds.
- Children may struggle when their calculations involve an exchange.

#### **Key questions**

- How many pence are there in one pound?
- How else can you make £1?
- How much money does \_\_\_\_\_ have?

How much money does \_\_\_\_\_\_ spend?

How much change will \_\_\_\_\_ get?

 If you have £ \_\_\_\_\_ and spend \_\_\_\_\_ p, how much change will you get?

#### **Possible sentence stems**

- One pound is equal to \_\_\_\_\_ pence.
- 100 \_\_\_\_\_ = \_\_\_\_, so £1 \_\_\_\_\_ p = \_\_\_\_\_ p

The change from £ \_\_\_\_\_ is \_\_\_\_\_p.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change



# **Find change**

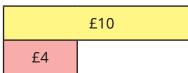
## **Key learning**

Kay has £10
 She buys a book for £4

Complete the bar model.

110 Source of Concernent of Ten Dounds

£4



How much change does Kay get?

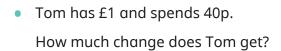
• Ben has this money.



How much money does Ben have?

He spends 30p on some sweets.

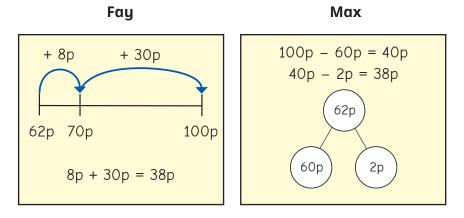
- How much does he have left?
- Ann has this money.
   She spends 65p.
   How much does she have left?



• Fay and Max each have a £1 coin.

They want to work out how much change they will get if they spend 62p.

Here are their methods.



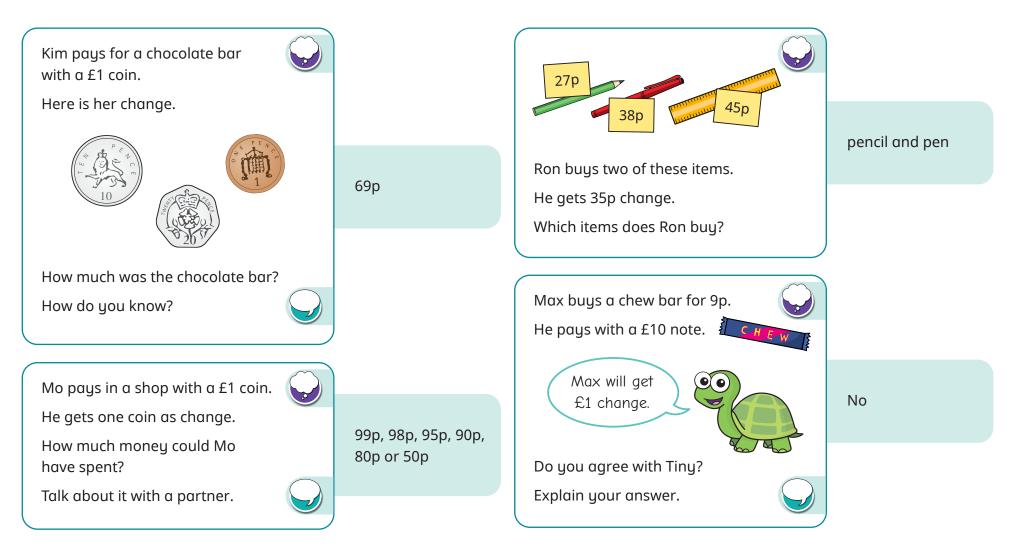
Use one of the methods to work out the change from £1 when you spend each amount.

▶ 61p	▶ 97p	► 24p	► 13p	► 78p	► 36p
P OIP	- J/p	× 24p	P ISP	p /op	- J0

White Rose Maths

# **Find change**





# Two-step problems



#### Notes and guidance

In this small step, children bring together all their learning from this block to complete two-step problems involving money. This step requires children to find the total, find the difference and calculate change, and combinations of all three within the same question.

Children must work out what they need to do first in the context of the question and may need support with this initially.

Finding the total can now include pairs of values that sum to a whole pound as children have explored this in a previous step. They continue to only calculate change from whole pounds.

The use of play money, number lines and part-whole models can support children in performing calculations, and bar models can be a useful way of representing a question to help children understand what they need to do.

#### **Key questions**

- How much money is there in total?
- How much money is spent?
- What is the total cost of \_\_\_\_\_ and \_\_\_\_?
- How much more does \_\_\_\_\_ cost than \_\_\_\_\_?
- What is the difference in price?

#### **Possible sentence stems**

- The total cost of \_\_\_\_\_ and \_\_\_\_\_ is £ \_\_\_\_\_ and \_\_\_\_\_ p.
- If I pay with a \_\_\_\_\_ note/coin, I will get \_\_\_\_\_ change.
- \_\_\_\_\_ costs \_\_\_\_\_ more/less than \_\_\_\_\_
- The difference in price between \_\_\_\_\_ and \_\_\_\_\_ is \_\_\_\_\_

## Things to look out for

- Children may struggle with the maths because they are overwhelmed by the context of a question.
- Children may not understand what they need to do first.
- Children may perform calculations in the incorrect order.

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

# **Two-step problems**

## **Key learning**

• Kay has £33 in the bank.

She is given £40 more.

How much money does Kay have now?

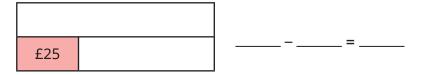
Complete the bar model and number sentence.



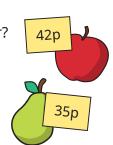
She buys a top for £25

How much money does she have now?

Complete the bar model and number sentence.



- An apple costs 42p. A pear costs 35p.
  - What is the total cost of an apple and a pear?Dan buys an apple and a pear.
  - He pays with a £1 coin.
  - How much change does he get?



• A coat costs £18

A T-shirt costs £5 less than a coat.

How much does a T-shirt cost?

Ben buys a coat and a T-shirt.

- How much does Ben spend?
- He pays with a £50 note.
- How much change does he get?
- A scarf is £12 and a bag is £25
   Sam buys one of each.
   She pays with a £50 note.
   How much change does she get?



A book costs £3 and 40p.
 A magazine costs £1 and 30p less than the book.
 What is the total cost of a book and a magazine?



White Rose Maths

# **Two-step problems**



