

# Reasoning and Problem Solving

## Step 4: Select Money

### National Curriculum Objectives:

Mathematics Year 2: (2M3a) [Recognise and use symbols for pounds \(£\) and pence \(p\); combine amounts to make a particular value](#)

Mathematics Year 2: (2M3b) [Find different combinations of coins that equal the same amount of money](#)

Mathematics Year 2: (2M9) [Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change](#)

### Differentiation:

Questions 1, 4 and 7 (Problem Solving)

**Developing** Complete a part-whole model using coins. Provide 2 answers. Includes coins only with an amount specified.

**Expected** Complete a part-whole model using coins and notes. Provide 2 answers. Includes notes and coins with an amount specified.

**Greater Depth** Complete a part-whole model using coins and notes. Provide 2 answers. Includes notes and coins within set parameters.

Questions 2, 5 and 8 (Problem Solving)

**Developing** Select the different possible combinations of money that fit the given criteria. Includes coins only.

**Expected** Select the different possible combinations of money that fit the given criteria. Includes coins and notes.

**Greater Depth** Select the different possible combinations of money that fit the given criteria. Includes coins and notes.

Questions 3, 6 and 9 (Reasoning)

**Developing** Identify and explain whether the amount of money provided is enough. Includes coins only.

**Expected** Identify and explain whether the amount of money provided is enough. Includes coins and notes.

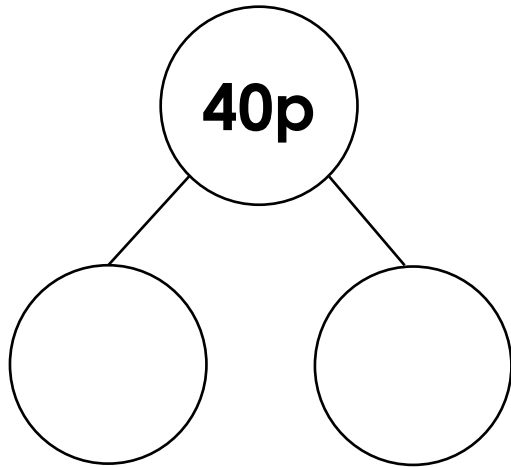
**Greater Depth** Identify and explain whether the amount of money provided is enough. Includes a mixture of images, words and numbers for notes and coins.

More [Year 2 Money](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

## Select Money

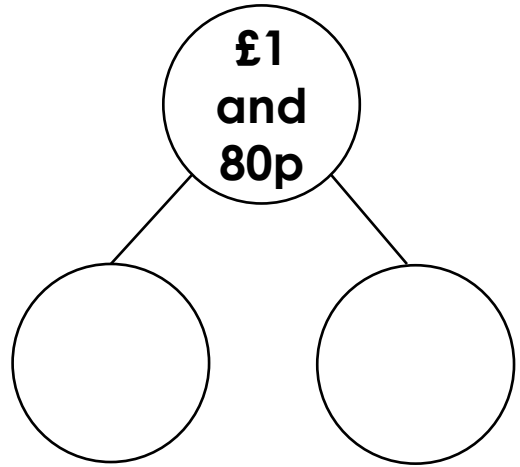
1a. Using 4 coins, complete the part-whole model. Give 2 possible answers.



PS

## Select Money

1b. Using 5 coins, complete the part-whole model. Give 2 possible answers.



PS

2a. Bobby and Debbie both have 70p.



Bobby

I have 4 coins.

I also have 4 coins.



Debbie

What combination of coins could Bobby and Debbie have?



PS

2b. Jenny and Chris both have 90p.



Jenny

I have 5 coins.

I also have 5 coins.



Chris

What combination of coins could Jenny and Chris have?



PS

3a. Beth and Harry want to buy a packet of pasta.



Beth thinks they have enough money.  
Harry thinks they need more money.

Who is correct? Explain how you know.



R

3b. Lauren and Adam want to buy a tin of beans.



Lauren thinks they have enough money.  
Adam thinks they need more money.

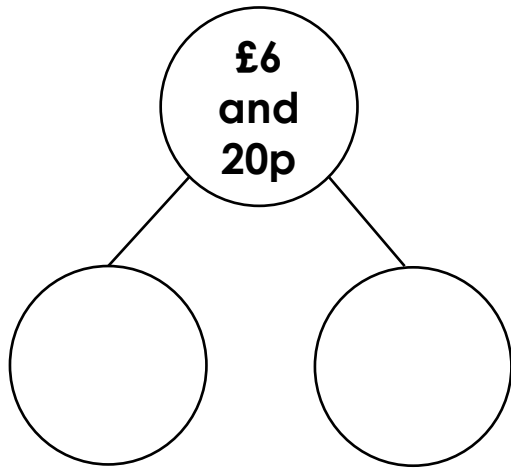
Who is correct? Explain how you know.



R

## Select Money

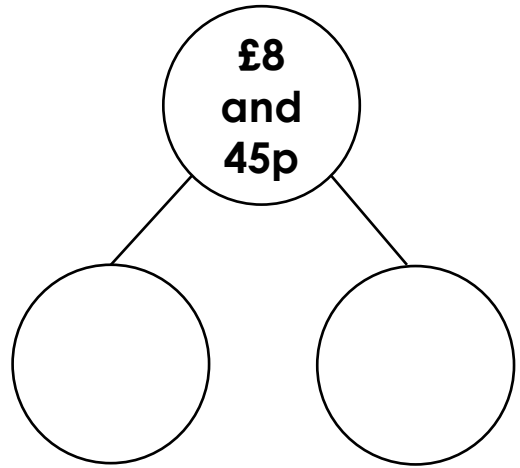
4a. Using 1 note and 3 coins, complete the part-whole model. Give 2 possible answers.



PS

## Select Money

4b. Using 1 note and 5 coins, complete the part-whole model. Give 2 possible answers.



PS

5a. Rebecca and Michael both have £5 and 40p.



Rebecca

I have three coins and a note.

I have five coins.



Michael

What combinations could Rebecca and Michael have?



PS

5b. Angela and Stephen both have £5 and 3p.



Angela

I have 6 coins.

I have one note and two coins.



Stephen

What combinations could Angela and Stephen have?



PS

6a. Alfie and Ella want to buy a packet of pencils.



Alfie thinks they have enough money.  
Ella thinks they need more money.

Who is correct? Explain how you know.



R

6b. Harrison and Lily want to buy a bottle of ketchup.



Lily thinks they have enough money.  
Harrison thinks they need more money.

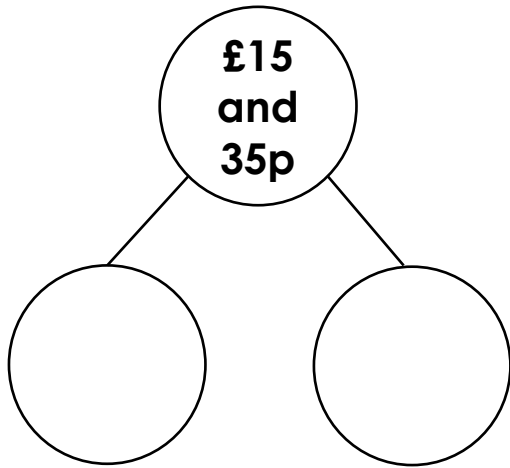
Who is correct? Explain how you know.



R

## Select Money

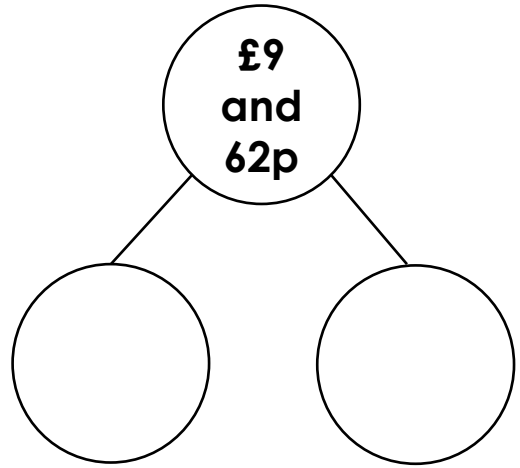
7a. Using notes and coins, complete the part-whole model. You can use up to two £5 notes. Give 2 possible answers.



PS

## Select Money

7b. Using notes and coins, complete the part-whole model. You cannot use the 10p coin. Give 2 possible answers.



PS

8a. Henry has 4 notes and 4 coins.



Henry

Two of my notes are £5.  
My total is no more than £40 and 40p.

What is the most amount of money that Henry could have? What is the least amount of money he could have? Prove it.



PS

8b. Amber has 3 notes and 5 coins.



Amber

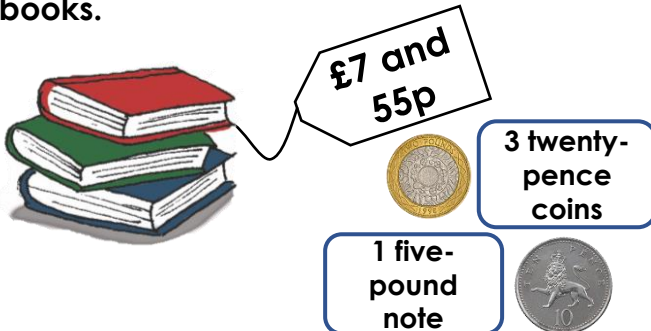
I have one £10, I only have one £2 and I have no copper coins.  
My total is less than £50.

What is the most amount of money that Amber could have? What is the least amount of money she could have? Prove it.



PS

9a. Lola and Sam want to buy some books.



Sam thinks they have enough money.  
Lola thinks they need more money.

Who is correct? Explain how you know.



R

9b. Toby and Mia want to buy a paddling pool.



Mia thinks they have enough money.  
Toby thinks they need more money.

Who is correct? Explain how you know.



R

## Reasoning and Problem Solving Select Money

### Developing

- 1a.  $20p + 20p$ ;  $10p + 10p + 10p + 10p$ ; 4 x 10p coins  
2a.  $50p + 10p + 5p + 5p$ ;  $20p + 20p + 20p + 10p$   
3a. Harry is correct. They only have  $50p + 50p + 20p + 20p + 5p = £1$  and 45p. They need £1 and 2p more.

### Expected

- 4a.  $£5 + £1 + 10p + 10p$ ;  $£5 + 50p + 50p + 20p$   
5a. Rebecca has  $£5 + 20p + 10p + 10p$ . Michael has  $£2 + £2 + £1 + 20p + 20p$ .  
6a. Alfie is correct because  $£5 + £1 + 50p + 10p + 5p = £6$  and 65p altogether. They can use  $£5 + 50p + 10p$ .

### Greater Depth

- 7a. Various answers, for example:  $£5 + £5 + £2 + £2 + £1 + 20p + 10p + 5p$ ;  $£5 + £5 + £2 + £1 + £1 + £1 + 20p + 5p + 5p + 5p$ ;  $£5 + £5 + £2 + £1 + £1 + 50p + 50p + 20p + 10p + 5p$ ;  $£5 + £5 + £2 + £2 + £1 + 10p + 10p + 5p$ ;  $£5 + £5 + £2 + £2 + 50p + 50p + 10p + 10p + 5p$   
8a. The most amount of money is £40 and 40p =  $£5 + £5 + £10 + £20 + 20p + 10p + 10p$ . The least amount of money is £20 and 4p =  $£5 + £5 + £5 + £5 + 1p + 1p + 1p + 1p$ .  
9a. Sam is correct because they have '1 lot of £5' + £2 + '3 lots of 20p' + 10p = £7 and 70p. They can use  $£5 + £2 + 20p + 20p + 20p$ .

## Reasoning and Problem Solving Select Money

### Developing

- 1b.  $50p + 50p + 50p + 20p + 10p$ ;  $£1 + 20p + 20p + 20p + 20p$ ;  $£1 + 50p + 10p + 10p + 10p$   
2b.  $50p + 10p + 10p + 10p + 10p$ ;  $50p + 20p + 10p + 5p + 5p$ ;  $20p + 20p + 20p + 20p + 10p$   
3b. Lauren is correct because they have  $£1 + 20p + 10p + 10p = £1$  and 40p altogether. They can use  $£1 + 20p + 10p$ .

### Expected

- 4b.  $£5 + £2 + £1 + 20p + 10p + 10p + 5p$ ;  $£5 + £1 + £1 + £1 + 20p + 20p + 5p$   
5b. Angela could have  $£2 + £2 + £1 + 1p + 1p + 1p$ ;  $£2 + £1 + £1 + £1 + 2p + 1p$  or  $£2 + £2 + 50p + 50p + 1p + 2p$ . Stephen has  $£5 + 2p + 1p$ .  
6b. Lily is correct because  $£1 + £1 + 10p + 2p + 2p + 2p + 2p = £2$  and 18p which is more than £2 and 17p.

### Greater Depth

- 7b. Various answers, for example:  $£5 + £2 + £2 + 20p + 20p + 20p + 2p$ ;  $£5 + £2 + £1 + £1 + 50p + 5p + 5p + 2p$ ;  $£5 + £2 + £2 + 20p + 20p + 20p + 1p + 1p$ ;  $£5 + £1 + £1 + £1 + £1 + 20p + 20p + 20p + 2p$ ;  $£5 + £2 + 50p + 50p + 50p + 20p + 20p + 20p + 2p$   
8b. The most amount of money is £46 =  $£10 + £10 + £20 + £2 + £1 + £1 + £1 + £1$ . The least amount of money is £22 and 20p =  $£10 + £5 + £5 + £2 + 5p + 5p + 5p + 5p$ .  
9b. Toby is correct because they only have '5 lots of £2' + '5 lots of 10p' + 20p + 20p + 5p + 2p = £10 and 97p. They need £1 more.