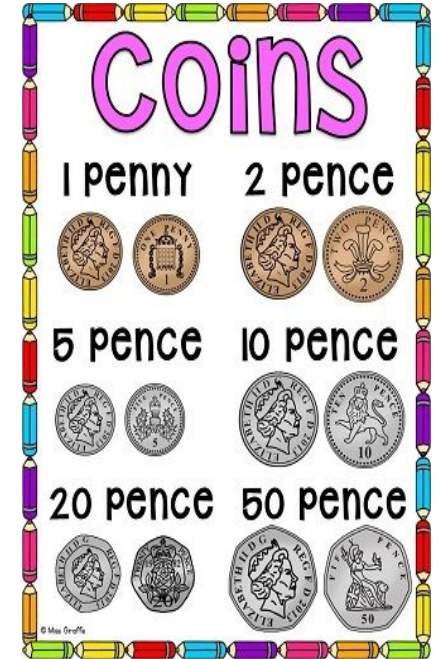


Maths

L.O. Make the same amount



Yesterday, we learned how to choose the least amount of coins to make an amount. Today we are going to think about how to use different combinations of coins to make the same amount.

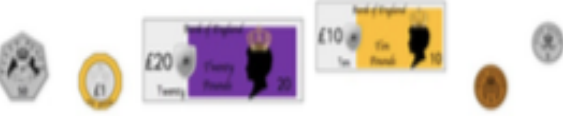


Key Vocabulary

Money Year 2

Money

Coins and notes used to pay for items.

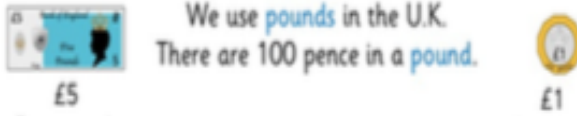


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Money Year 2

Pounds

The symbols used for pound is £.
We use **pounds** in the U.K.
There are 100 pence in a **pound**.



£5 Five pounds £1 One pound

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Money Year 2

Convert

Convert means to change.
You can **convert** pence into pounds and pence and **convert** pounds and pence into pence.

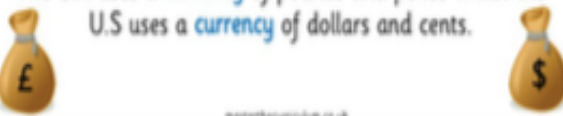
100p is converted to £1 £1 is converted to 100p

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Money Year 2

Currency

Is a system of money used in a country.
The U.K uses a **currency** of pounds and pence whilst the U.S uses a **currency** of dollars and cents.



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Money Year 2

Decimal Point

A **decimal point** is a small dot to separate the whole number from the fractional part.

£2.56

2 whole pounds A fraction/part of a whole pound

Decimal point

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Money Year 2

Silver Coins

Coins that are silver.



5p 10p 20p 50p

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Money Year 2

Pence

Pence is used in the U.K. 100 **pence** equals one pound.

The letter p is used to represent **pence**.



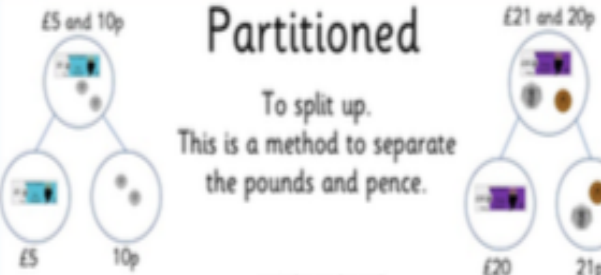
1p 2p 5p 10p 20p 50p

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Money Year 2

Partitioned

To split up.
This is a method to separate the pounds and pence.



£5 and 10p £21 and 20p

£5 10p £20 21p

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Money Year 2

Copper Coins

Coins that are copper.



1p 2p

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Fluency

Count in 5s from 0 and back.

Use column addition to solve these calculations:

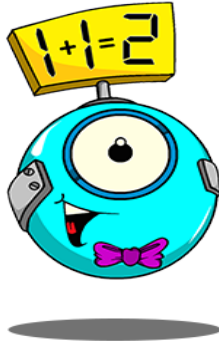
$$24 + 25 =$$

$$67 + 12 =$$

$$33 + 42 =$$

$$15 + 31 =$$

$$56 + 23 =$$



Challenge:

Write a fact family (2 additions and 2 subtractions) for 3 of the calculations. Show each one as a part whole.

Anchor Task

James says, "The bigger a coin is the more it is worth."



Is James' statement always, sometimes or never true?
Explain your answer.

Answer

James says, "The bigger a coin is the more it is worth."

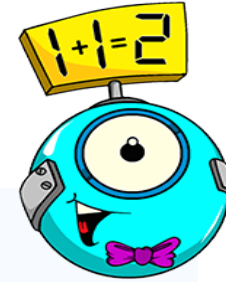


Is James' statement always, sometimes or never true?

Explain your answer.

James' statement is sometimes true – for example, a 2 p coin is larger than a 10 p coin, a 5 p coin and even a 20 p coin; however, a 10 p coin is bigger than a 1 p coin, and a 20 p coin is bigger than a 5 p coin.

Recap



Look at the coins and notes below.



Challenge:

What is the smallest number of coins you can use to make:

54p

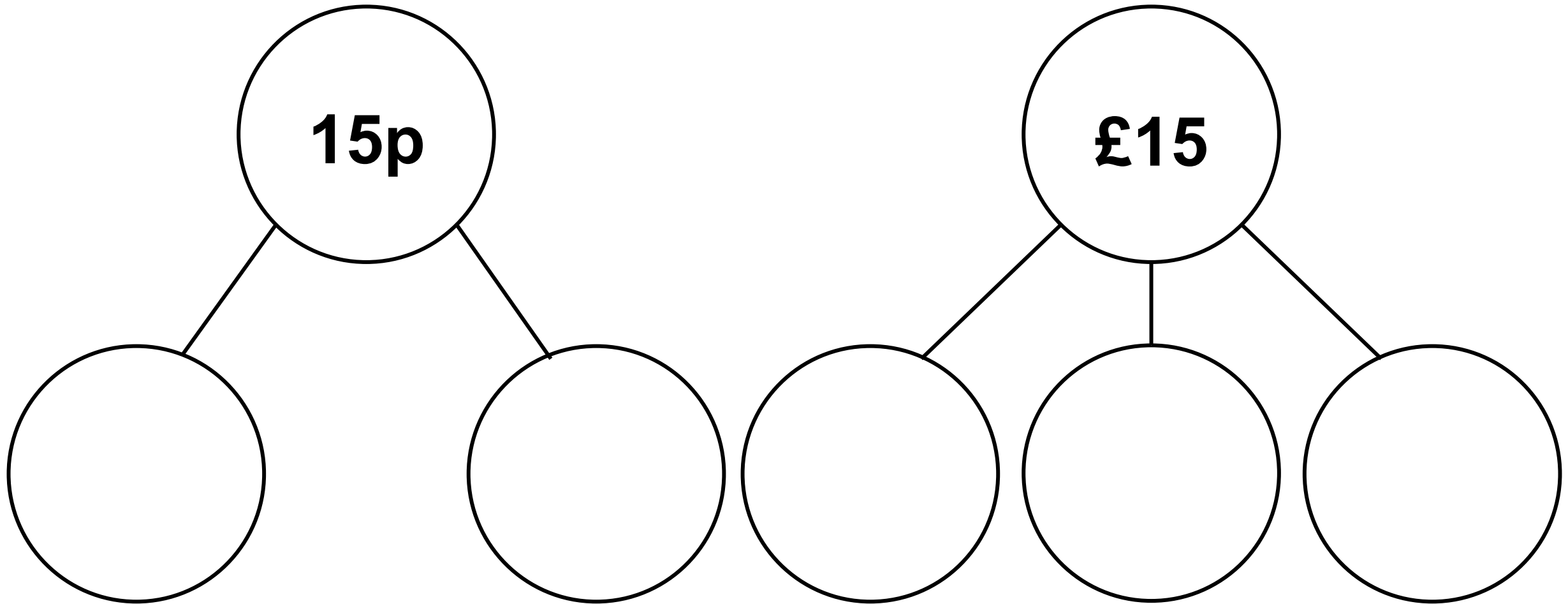
26p

£1.60

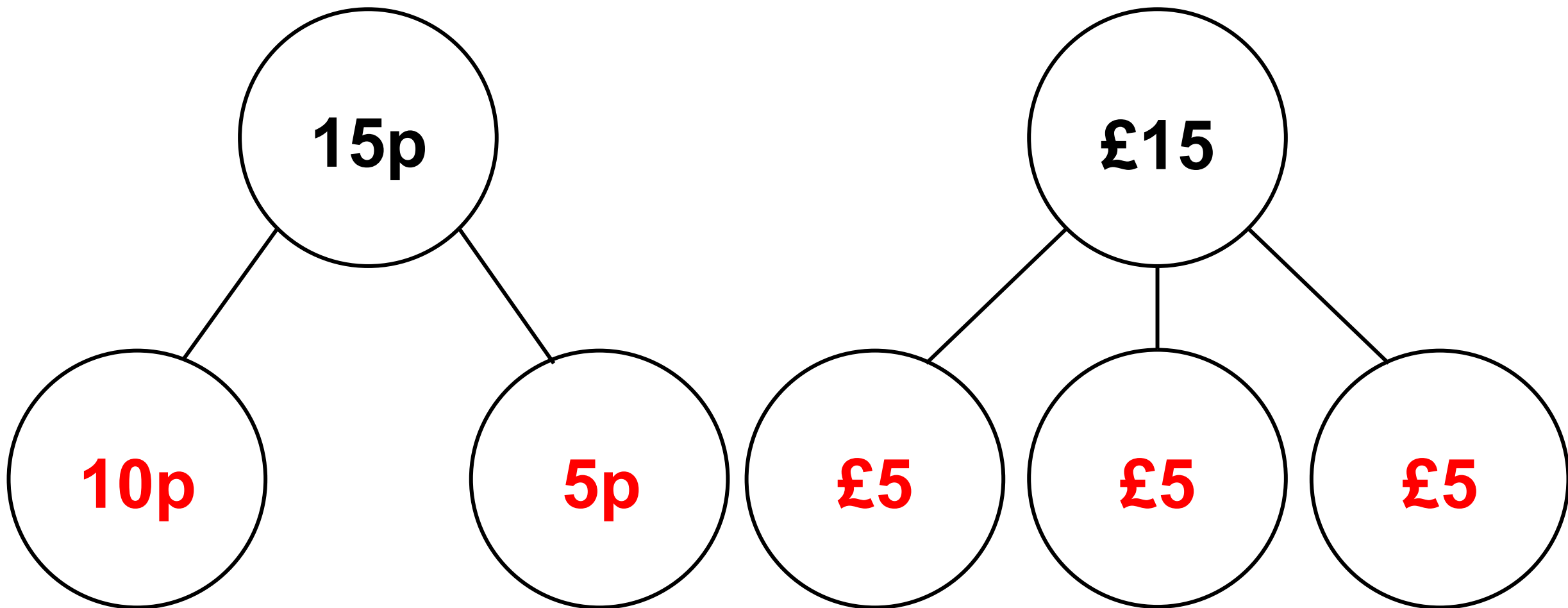
Can you describe them? What is the same? What is different?

Fluency

Complete the part-whole models.

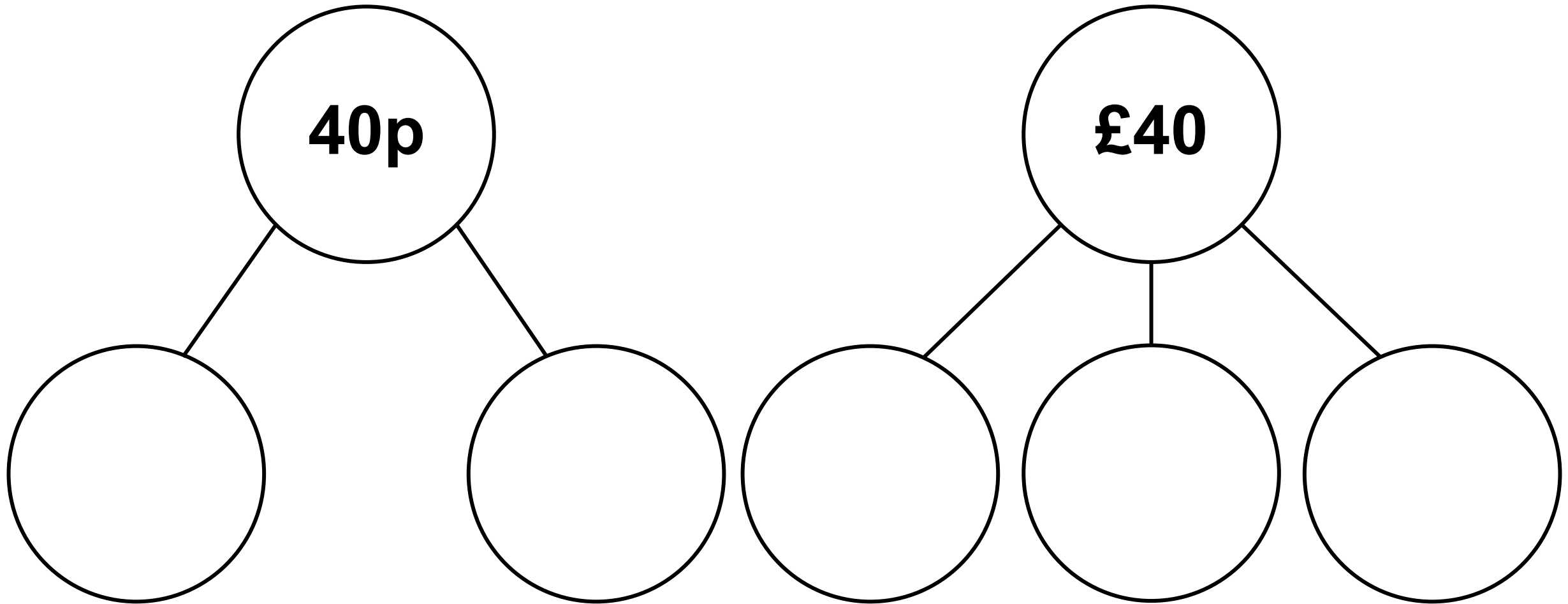


Answers

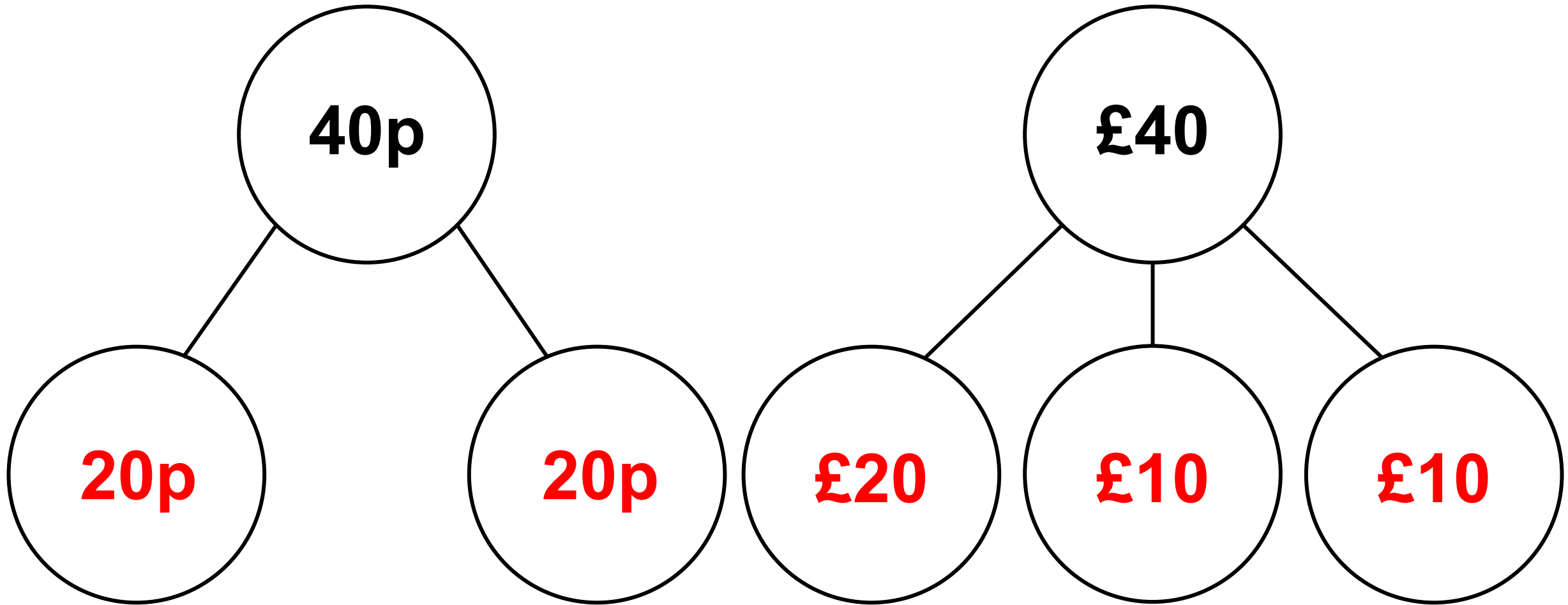


Fluency

Complete the part-whole models.



Answer



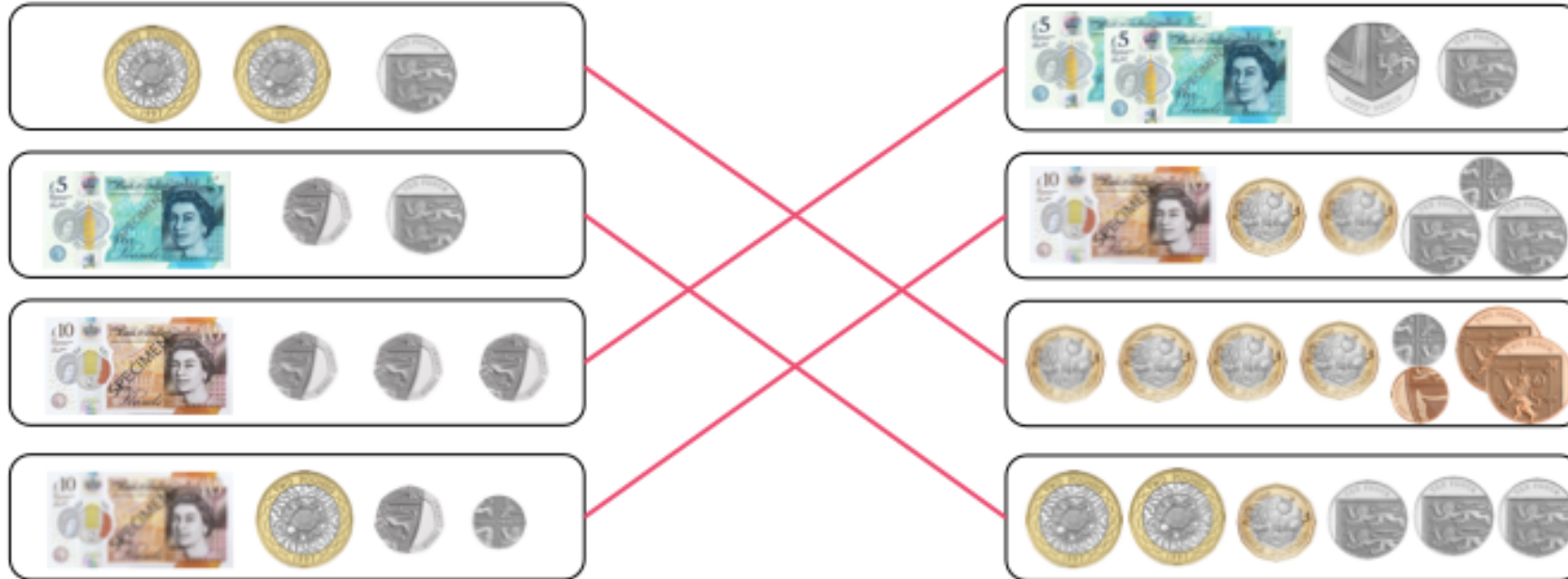
Explore

Match the amounts of money below:



Answer

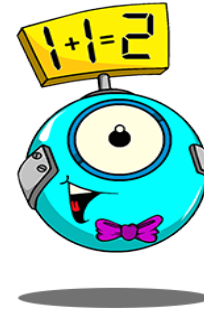
Match the amounts of money below:



Do you notice how you can make an amount in different ways?

Explore

How would you make:
20p?



Does it matter which way we make it? Talk to your grown up.

Is there more than one way?

How many ways can you think of?



Answer

How would you make **20p**?



These are some of the ways I found. Did you find any more? Does it matter which way we make it?

Explore

How would you make:

5p?

Only using copper coins



Which coins can't I use?



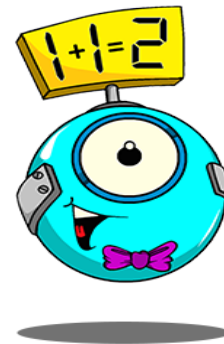
Answers

How would you make **5p** only using copper coins?



Did we all do it the same way?

How many ways did we find?

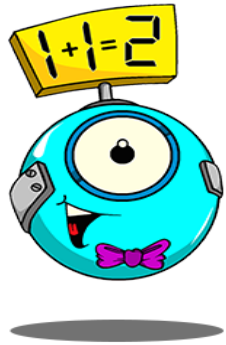


Challenge:

How many ways can you make 20p using silver coins?

Guided Task

Use the coins below as many times as you wish to make the total 60 p.



Challenge:

What's the least number of coins you could use?
What's the most?

Problem Solving

Make 30p three ways using the coins below.
You can use each coin more than once.



Answer

Make 30p three ways using the coins below.
You can each coin more than once.



Possible examples:

10p, 10p, 10p

10p, 10p, 5p, 5p

10p, 5p, 5p, 5p, 5p

5p, 5p, 5p, 5p, 5p, 5p

30 x 1p

15 x 2p

Reasoning



You can make 10p in at least 5 different ways using coins.

Do you agree? _____

Explain why.

Answer



You can make 10p in at least 5 different ways using coins.

Do you agree? Yes

Explain why.

2p, 2p, 2p, 2p, 2p

2p, 2p, 2p, 2p, 1p, 1p

2p, 2p, 2p, 1p, 1p, 1p, 1p

2p, 2p, 1p, 1p, 1p, 1p, 1p, 1p

2p, 1p, 1p, 1p, 1p, 1p, 1p, 1p, 1p

1p, 1p, 1p, 1p, 1p, 1p, 1p, 1p, 1p, 1p

Make the same amount



- 1 Draw 50p three ways using the coins below.
You can use the coins more than once.



--	--	--

- 2 How many ways can you make 10p using only copper coins?
List your combinations below.

--

- 3 Kat says,



These coins make
87p.



Tick (✓) the correct answer.

True

☐

False

☐

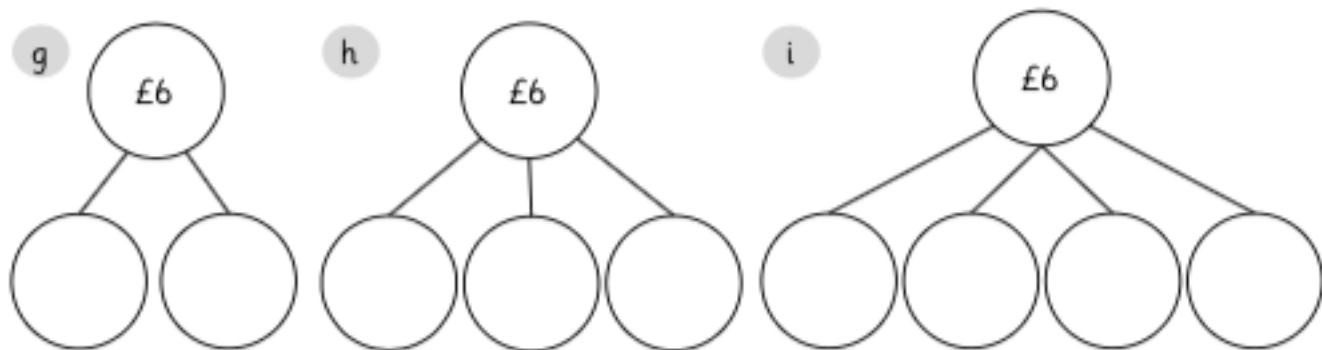
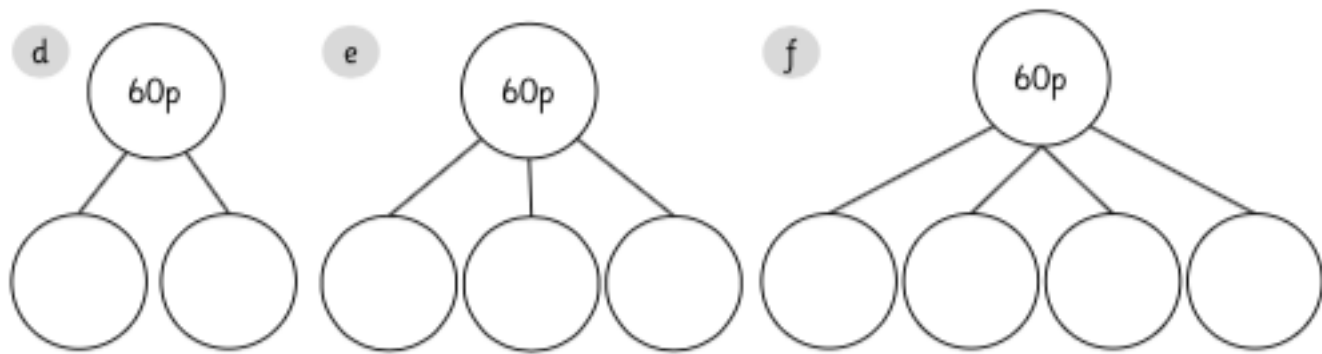
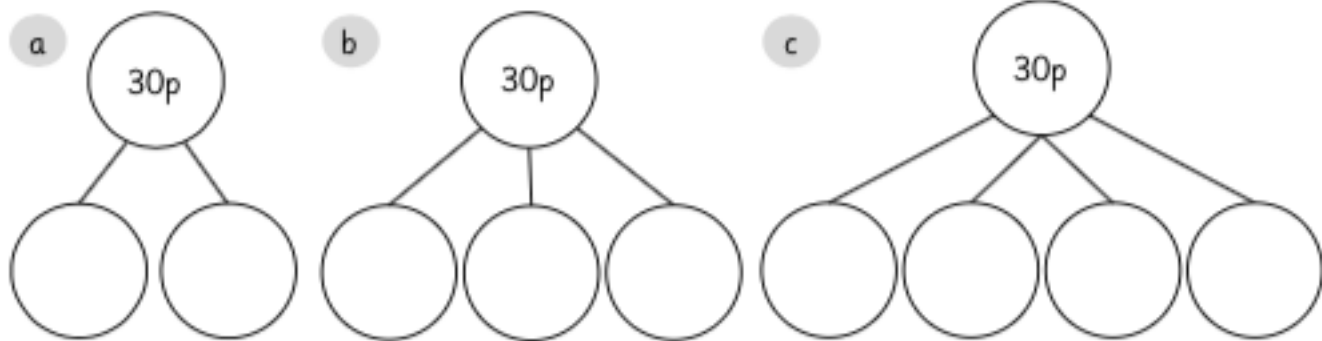
Explain your answer.

Independent Task

If you want a little more practise, have a go at these. Remember these are optional- only do them if you want to!

Extra Challenge

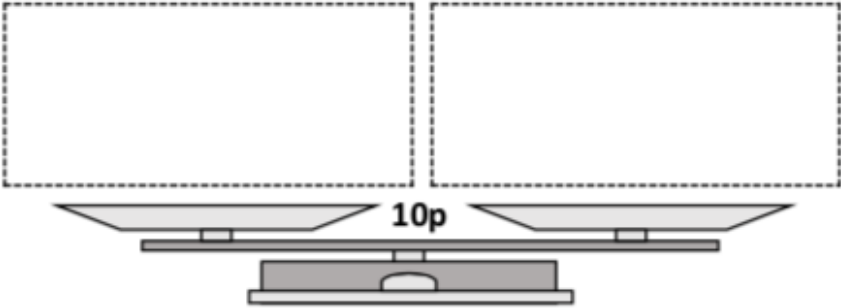
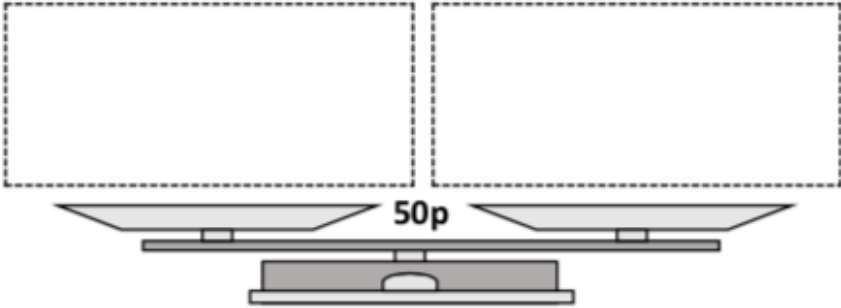
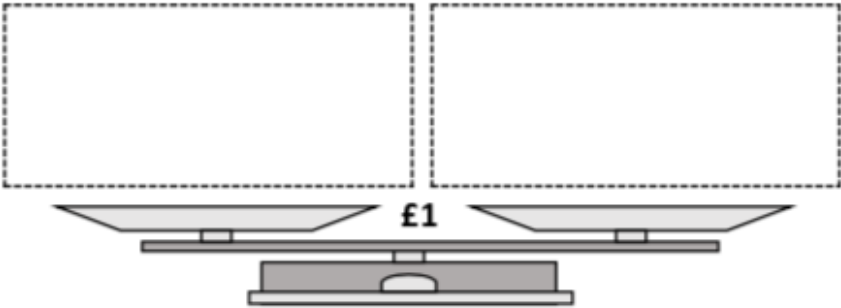
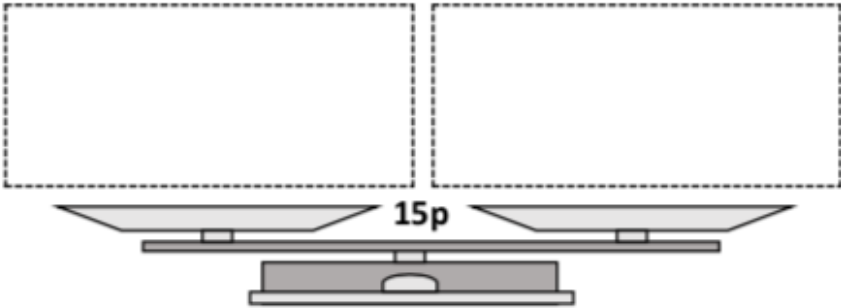
1 Complete the part-whole models using note or coin values.



If you want a little more practise, have a go at these. Remember these are optional- only do them if you want to!

Finding things a little tricky?

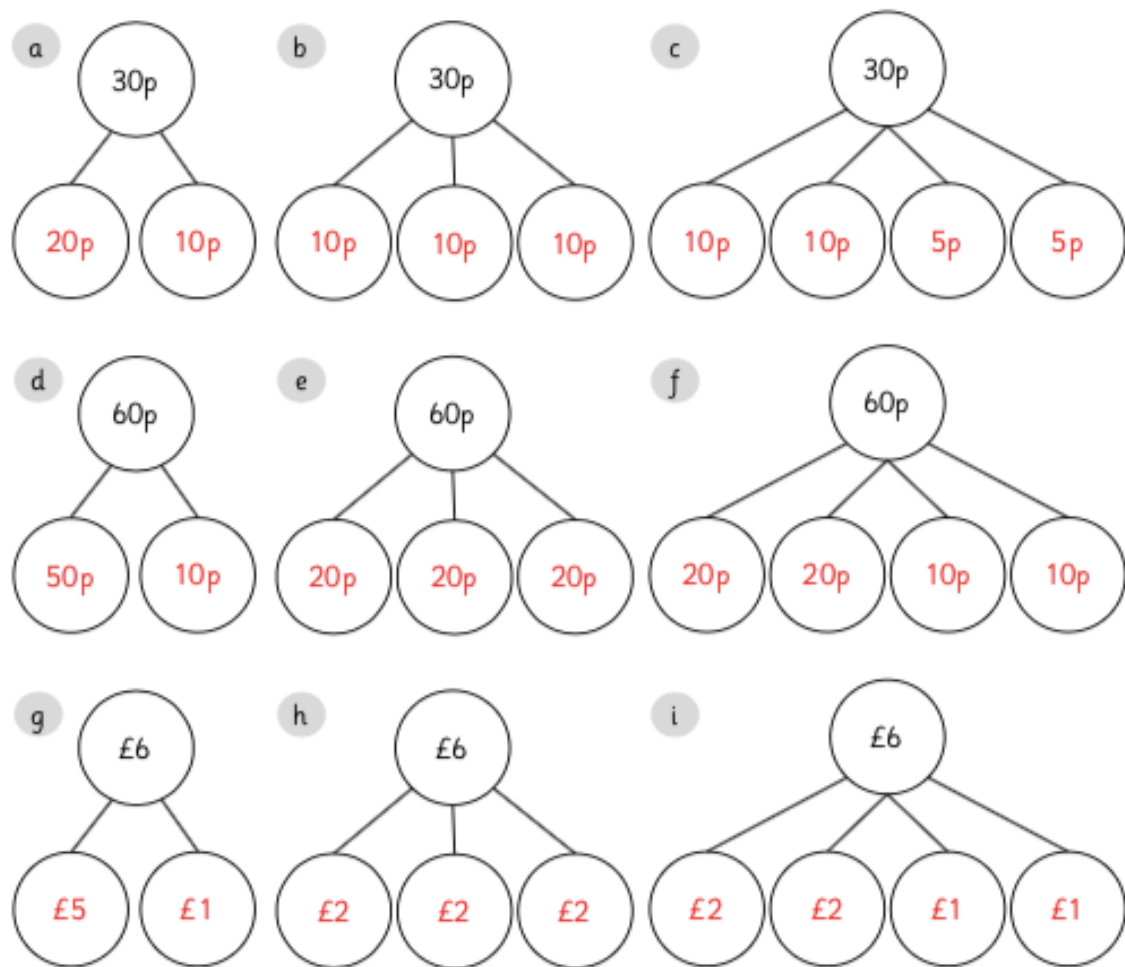
Find two sets of coins that make the same amount and stick them on the correct scales.

If you're finding things a little tricky, have a go at this task.!



ANSWERS



- 1 Draw 50p three ways using the coins below.
You can use the coins more than once.



Any representation of 50p drawn 3 different ways.
Some example answers are:

20p, 20p, 10p
20p, 10p, 10p, 10p
10p, 10p, 10p, 10p, 10p
10p, 10p, 10p, 10p, 5p, 5p

- 2 How many ways can you make 10p using only copper coins?
List your combinations below.

Answers are:
2p, 2p, 2p, 2p, 2p
2p, 2p, 2p, 2p, 1p, 1p
2p, 2p, 2p, 1p, 1p, 1p, 1p
2p, 2p, 1p, 1p, 1p, 1p, 1p, 1p
2p, 1p, 1p, 1p, 1p, 1p, 1p, 1p, 1p
10 x 1p

- 3 Kat says,



These coins make
87p.



Tick (✓) the correct answer.

True

☐

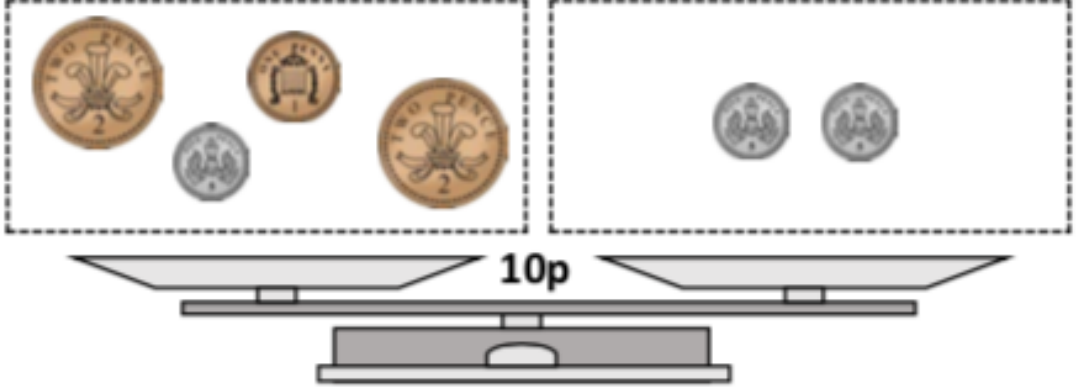
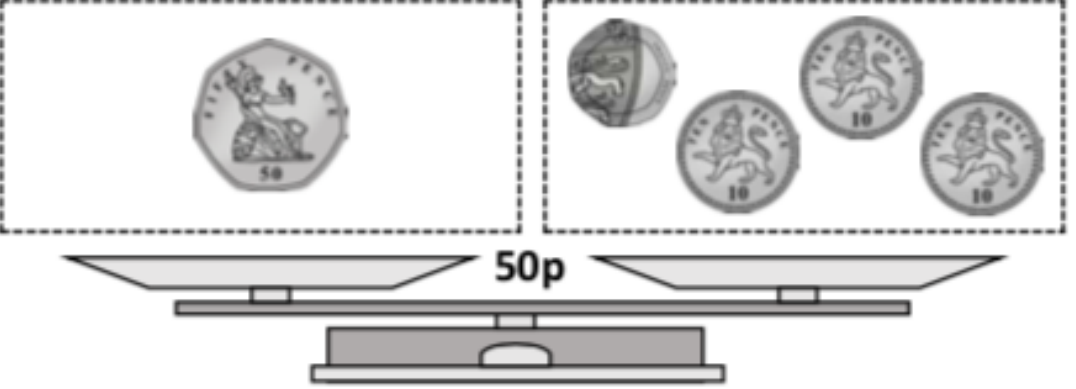
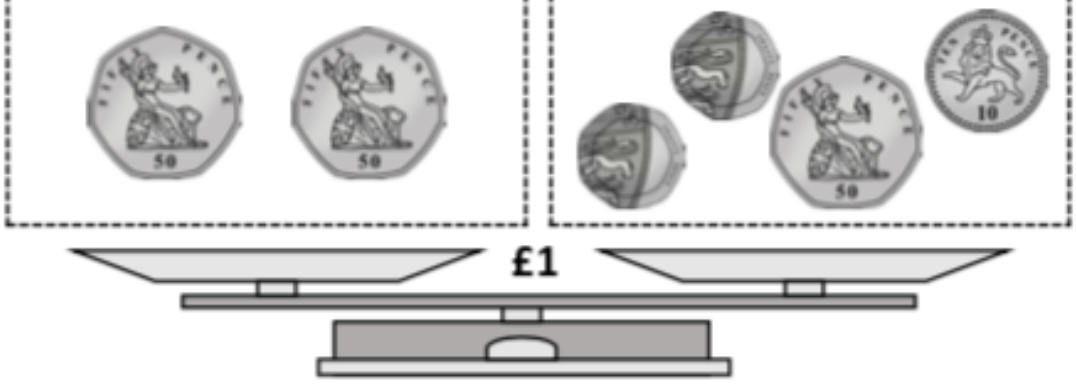
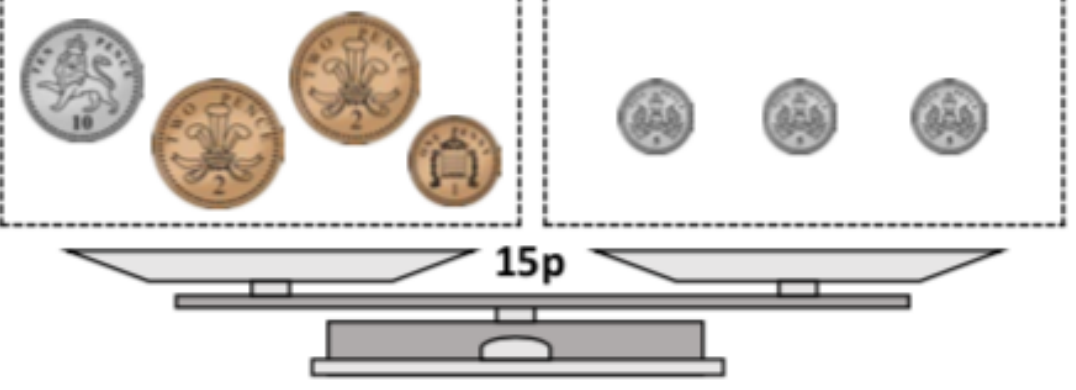
False

☒

Explain your answer.

There is only 86p. To make 87p you would
need another 1p coin.

Find two sets of coins that make the same amount and stick them on the correct scales.

 10p The left pan contains three coins: two 2p coins and one 1p coin. The right pan is empty.	 50p The left pan contains one 50p coin. The right pan contains four 10p coins.
 £1 The left pan contains two 50p coins. The right pan contains one 50p coin, one 10p coin, and two 1p coins.	 15p The left pan contains one 10p coin, one 2p coin, and one 1p coin. The right pan contains three 5p coins.