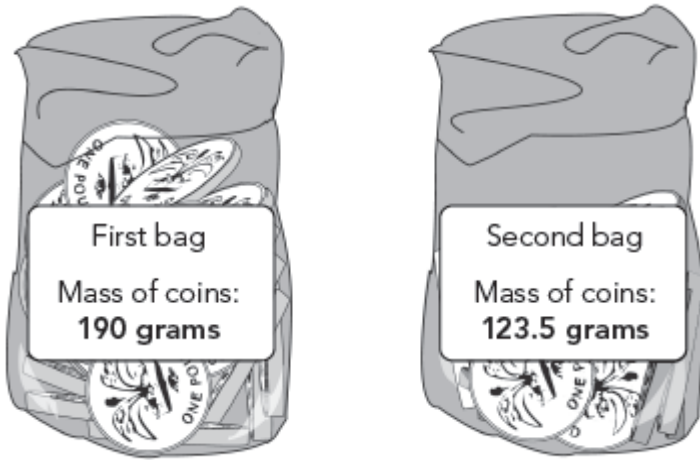


Hot Reasoning Week 8 Year 5

Q1. Here are two plastic bags of £1 coins.



The **first** bag contains **20** £1 coins.

How many £1 coins does the **second** bag contain?



Show your method

2 marks

Q2.

A school buys some yo-yos as prizes.

The yo-yos cost £4.25 each.

The school has **£40** to spend on prizes.



They buy as many yo-yos as they can.

How much money is left?



Show your method

2 marks

Q3. In a class, 18 of the children are girls.

A quarter of the children in the class are boys.

Altogether, how many children are there in the class?



Show your working

A large rectangular box with a thin black border, intended for the student to show their working. On the left side, there is a smaller, rounded rectangular box with a thin black border containing the text "Show your working". In the bottom right corner of the large box, there is a smaller, empty rectangular box with a thick black border, likely for the final answer.

2 marks



Q4.

Mina has **5 more** marbles than Kirsty.

Kirsty has **2 more** marbles than Seb.

Altogether they have **30** marbles.

How many marbles does each child have?

Show your working

| | | | | | |
|------|----------------------|--------|----------------------|-----|----------------------|
| Mina | <input type="text"/> | Kirsty | <input type="text"/> | Seb | <input type="text"/> |
|------|----------------------|--------|----------------------|-----|----------------------|

2 marks

ANSWERS!!

M1. 13

Accept £13

or

Shows the value 9.5 or equivalent

OR

Shows a complete correct method with not more than one computational error, eg:

- $\frac{123.5}{190} \times 20$

- $\frac{190}{20} = 9$ (error), $\frac{123.5}{9} \approx 14$
! 13 g

For 1 mark, accept as evidence of correct method

1

M2. Award **TWO** marks for the correct answer of £1.75

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg:

- $40 \div 4.25 = 9.411\dots$

$$4.25 \times 9 = 38.25$$

$$40 - 38.25$$

OR

- 10 yo-yos cost £42.50

$$9 \text{ yo-yos cost } £42.50 - £4.25 = £38.25$$

$$£40 - £38.25$$

*Accept for **ONE** mark £175 **OR** £175p **OR** 1.75p as evidence of appropriate method.*

*Accept for **ONE** mark sight of £38.25 **OR** 38.25 **OR** 3825*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2

M3. Award **TWO** marks for the correct answer of 24

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg:

- $18 \div 3 \times 4 =$ wrong answer

OR

- $18 \div 3 = 6$

$$6 + 18 = \text{wrong answer}$$

Working must be carried through to reach an answer for the award of **ONE** mark.

OR

- a 'trial and improvement' method, eg

$$18 \text{ girls} + 14 \text{ boys} = 32 \quad 32 \div 4 = 8$$

$$18 \text{ girls} + 10 \text{ boys} = 28 \quad 28 \div 4 = 7$$

$$18 \text{ girls} + 4 \text{ boys} = 22 \quad 22 \div 4 =$$

*A 'trial and improvement' method must show evidence of improvement, but a final answer need not be reached for the award of **ONE** mark.*

Up to 2

M4. Award **TWO** marks for the correct answer of

| | | | | | |
|------|----|--------|---|-----|---|
| Mina | 14 | Kirsty | 9 | Seb | 7 |
|------|----|--------|---|-----|---|

If the answer is incorrect, award **ONE** mark for:

- two numbers correct

OR

- 14 **AND** 9 **AND** 7 with some or all attributed to the wrong child

OR

- evidence of appropriate working, eg

$$30 - 5 + 2 = 27$$

$$\text{Kirsty} = 27 \div 3 = \text{wrong answer}$$

$$\text{Mina} = \text{wrong answer} + 5$$

$$\text{Seb} = \text{wrong answer} - 2$$

*Working must be carried through to reach an answer for the award of **ONE** mark.*

OR

- a 'trial and improvement' method, eg

$$10 + 5 + 3 = 18$$

$$20 + 15 + 13 = 48$$

$$15 + 10 + 8 = 33$$

*A 'trial and improvement' method must show evidence of improvement, but a final answer need not be reached for the award of **ONE** mark*

Up to 2