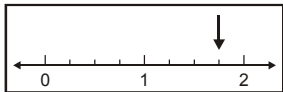


Year 4 optional SAT paper B mark Scheme

1. 613 **OR** 704 **OR** 825 1
- Award the mark if no numbers are circled, provided a correct total is given.*
- Award the mark providing at least one of the three correct totals is given irrespective of which numbers are circled.*
- [1]**

2. Boxes completed as shown: 1
- | | | |
|----|--------------------------|----|
| 52 | <input type="checkbox"/> | 17 |
| 19 | <input type="checkbox"/> | 91 |
| 50 | <input type="checkbox"/> | 34 |
- All three signs must be correct for the award of the mark.*
- [1]**

3. 45 1
- [1]**

4. An arrow drawn on the number line as shown: 1
- 
- Accept any other clear way of indicating $1\frac{3}{4}$ on the number line as long as the intention is clear.*
- Accept slight inaccuracies, provided the intention is clear.*
- [1]**

5. Award **TWO** marks for the correct answer of £2.45

Up to 2

Accept £2.45p OR £2 45

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

$$35 \times 7 = \text{wrong answer}$$

OR

$$30 \times 7 = 210$$

$$5 \times 7 = 35$$

$$210 + 35 = \text{wrong answer}$$

OR

award **ONE** mark for £245 **OR** £245p **OR** £24.5 as evidence of appropriate working.

*An answer must be given for the award of **ONE** mark.*

[2]

Examples of responses

Bashir's working out shows his intention to calculate 35p multiplied by 7. To simplify the calculation he has broken it down into three separate multiplications then added the three answers together. Although he made an error in calculating two lots then three lots of 35p, his method is complete and correct since he gave an answer. Bashir can be awarded the mark. Adam has also used multiplication but has applied a vertical algorithm. However, he has made an error in place value by omitting the zero from 7×30 and calculating this as 21. His method is, therefore, not correct. Adam cannot be awarded the mark.

Bashir

Handwritten working out for Bashir:

$$\begin{aligned} 7 \times 35p &= 60 + 60 = 1.20p \\ 2 \times 35p &= 60p \quad 1.20p + 70p = \\ 3 \times 35p &= 70p \\ 2 \times 35p &= 60p \end{aligned}$$

1.90p

1 mark

Adam

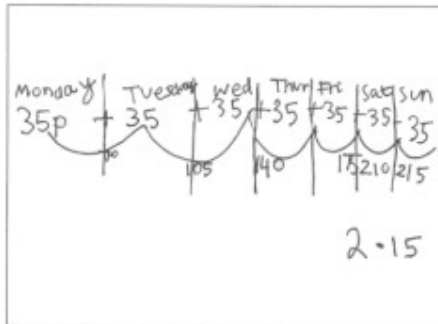
Handwritten vertical multiplication for Adam:

$$\begin{array}{r} H \text{ t u} \\ 35 \\ \times 7 \\ \hline \end{array}$$

0 marks

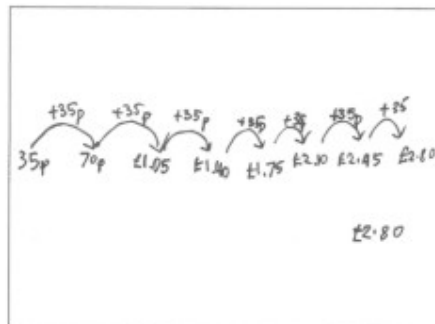
Jay has shown in her repeated addition method that she recognised the need to calculate seven lots of 35p. She made an error in the final addition by adding 35p to 210p incorrectly but has correctly converted her answer of 215p to £2.15. Her method is complete and correct. Jay can be awarded the mark. Bob's working shows that he understood that he needed to count on 35p seven times but he made an error starting at 35p instead of at 0p and ended up calculating (allowing for a later error) eight lots of 35p. His method is not correct. Bob cannot be awarded the mark.

Jay



1 mark

Bob



0 marks

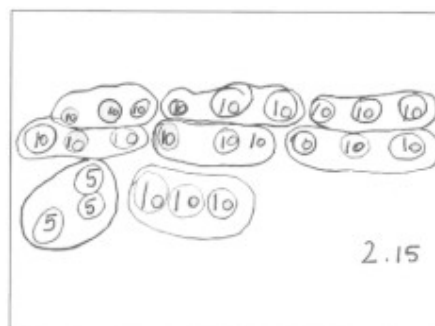
Carol has drawn seven tins of cat food and written 35p below each one. We can assume from her answer of £2.35 that she added 35p seven times. Although she made an error in this calculation, her method is complete and correct. Carol can be awarded the mark. It is likely that Tony also recognised the need to add seven lots of 35p since his working shows his attempt to partition the 35p amounts into groups of 10p and 5p. He has successfully recorded seven lots of 30p but has only recorded three lots of 5p. His method is not complete or correct. Tony cannot be awarded the mark.

Carol



1 mark

Tony



0 marks

6. south-east

1

Accept SE.

Accept an unambiguous indication on the spinner.

[1]

7. Two fractions circled as shown:

1

$$\frac{1}{8} \quad \left(\frac{6}{10}\right) \quad \left(\frac{5}{8}\right) \quad \frac{3}{10}$$

Both fractions must be correct for the award of the mark.

Accept any other clear way of indicating the two correct fractions, such as underlining or ticking.

[1]

8. An explanation which compares prices and which recognises that the 'half price' cost is less than the '3 for 2' cost, eg

1
U1

- 'The half price offer costs 40p, the other offer costs 60p so the half price one is 20p cheaper';
- 'I know because 40p is less than 60p';
- 'The half price offer costs 20p less'.

(Although the child has not stated the cost of each offer, we can assume that the child must have calculated them to reach this conclusion.)

Do not award the mark for ticking the 'Half price' box alone.

Do not accept an explanation which compares pencils rather than prices, eg

- 'I think because there are more pencils in the half price than the 3 for 2';
- 'Because you only get 2 in a packet and so the half price one is better'.

Also accept:

- Half price

40 p

 ✓ 3 for 2

60 p

The prices must be stated **AND** the 'half price' offer indicated.

(Although this is not the preferred form of response, the child has clearly communicated their understanding.)

Do not accept an explanation which compares prices incorrectly, eg

- 'Because the half price ones are 40p and the 3 for 2 ones are 90p'
(This shows that the child has not understood the concept of 3 for 2).

Do not accept an explanation which is vague or arbitrary, eg

- 'One pack of pencils costs less'.

Award the mark if the '3 for 2' box is ticked **OR** neither box is ticked provided a correct unambiguous explanation is given.

[1]

9. Table completed as shown:

1

	property of shape	
	is an octagon	has at least 1 right angle
shape A	✗	✓
shape B	✓	✗
shape C	✗	✗
shape D	✓	✓

*All three answers must be correct for the award of the mark.
Accept any other clear way of indicating the properties, such as 'Y' and 'N'.*

[1]

10.

1
U1

$$\begin{array}{|c|c|c|} \hline 1 & 3 & 7 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 6 & 3 \\ \hline \end{array} = 200$$

Both digits must be correct for the award of the mark.

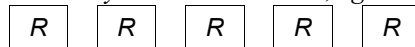
[1]

11. 5

1

Do not accept $\frac{1}{4}$

*Accept five stickers indicated on the drawing, provided it is clear they are **rabbit** stickers, eg*



[1]

12. 5

1

Accept .625 OR 0.625 OR $\frac{5}{8}$ OR 6 remainder 5 OR 6.625 OR

$$6\frac{5}{8}$$

*Do not accept 48
remainder 5*

[1]

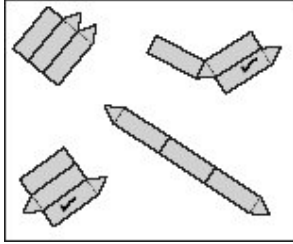
13. Answer in the range 8 to 9 inclusive.

1

[1]

14. Two nets ticked as shown:

1



Both nets must be ticked for the award of the mark.

Accept any other clear way of indicating the two correct nets, such as circling.

[1]

15. 34

1

[1]

16. F1

1

Do not accept 1F.

[1]

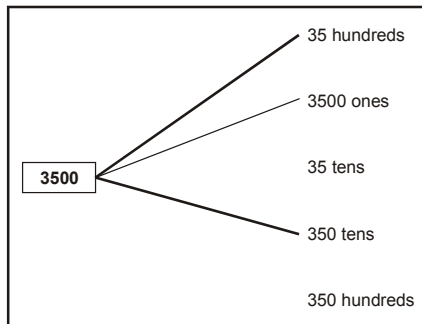
17. 1324

1

[1]

18. Diagram completed as shown:

1



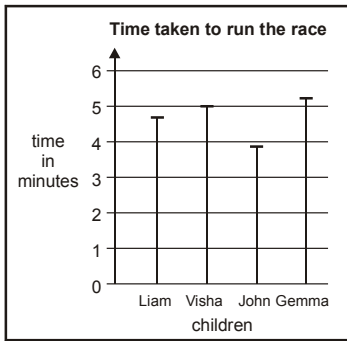
Both lines must be drawn correctly for the award of the mark.

Lines need not touch the numbers exactly, provided the intention is clear.

[1]

19. Graph completed as shown:

1



Line drawn between 10.4cm and 10.9cm inclusive.

Accept slight inaccuracies in drawing, provided the intention is clear.

Accept line drawn with or without a horizontal finish.

[1]

20. 3624

1

[1]

21. 1.50 OR 1.5

1

Accept $1\frac{1}{2}$ m

Accept 150cm

Do not accept 150m

[1]

22. 125

1

[1]

23. 10

1
U1

[1]

24. 0.74

1

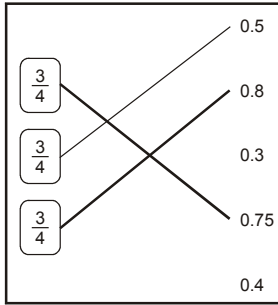
Accept also .74

Do not accept 74

[1]

25. Diagram completed correctly as shown:

1

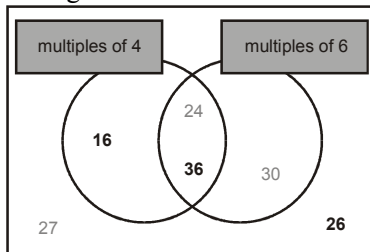


*Both lines must be drawn correctly for the award of the mark.
Lines need not touch boxes or numbers exactly, provided the intention is clear.*

[1]

26. Award **TWO** marks for all three numbers correctly placed in the regions as shown:

Up to 2



*Do not accept a number repeated in different regions.
Do not penalise answers which offer additional numbers (other than 16, 26 and 36) on the diagram, whether correctly placed or not.*

If the answer is incorrect, award **ONE** mark for two numbers correctly placed.

[2]

27. 85

1

*Accept £0.85p OR £0 85p
Do not accept 0.85p OR £85p*

[1]

28. (4, 6)

1

*Both numbers must be correct for the award of the mark.
Accept correct answers written on the diagram with or without brackets.
Coordinates must be written in the correct order.*

[1]

29. 80

1

[1]

30. 8500

1

[1]

31. Chart completed as shown:

1



[1]

32. A and D

1

Both letters must be correct for the award of the mark.

Accept either order.

Accept any other clear way of indicating the two correct shapes, such as circling.

[1]

33. 17

1
U1

[1]