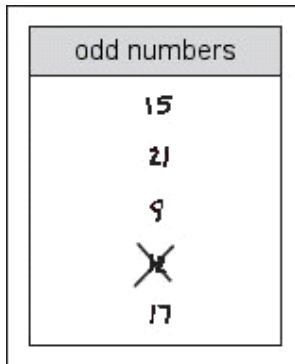# Year 3 Maths Optional SAT Mark Scheme

Paper A

1. Practice question - 35

[0]

2. 58   1

[1]

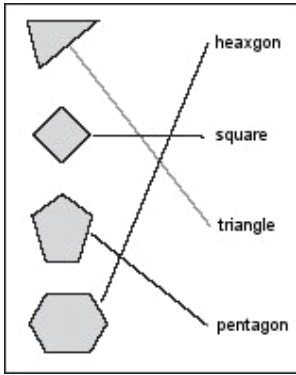**3.** 12 crossed out as shown: 1

Accept any other clear way of indicating the correct number, such as a circle or a tick.

Accept also the four odd numbers crossed out, provided that '12' is not crossed out.

[1]

4. Matches all three shapes as shown: 1

All three lines must be drawn correctly for the award of the mark.

Lines need not touch the shapes or names exactly, provided the intention is clear.

[1]

5. 4 1

[1]

6. 90p 1
U1

*Accept £0.90p **OR** £0 90p **OR** £.90p*

***Do not** accept £90p **OR** 0.90p*
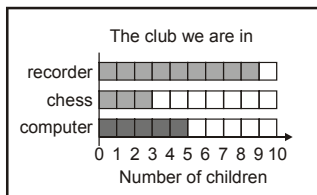
[1]

7. 22 1

[1]

8. 57 1

[1]

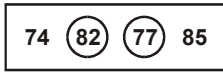**9.** (a) 6 1

(b) Graph completed as shown: 1

The blocks need not be shaded. Accept any other clear way of indicating the correct number of blocks, such as ticking or circling.
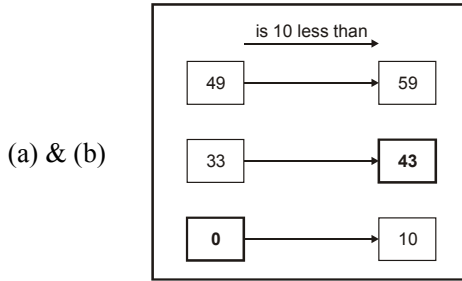
[2]

10. Two numbers circled as shown:

74 ⟨82⟩ ⟨77⟩ 85

> ***Both*** *numbers must be correct for the award of the mark.*
> *Accept any other clear way of indicating the two correct numbers, such as underlining or ticking.*

[1]
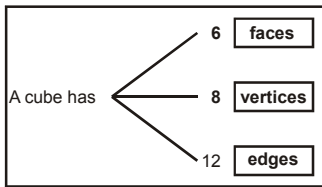
11. Diagram completed correctly as shown:

is 10 less than →

49	→	59
33	→	**43**
0	→	10

(a) & (b)   2

[2]

12. Diagram completed as shown: 1
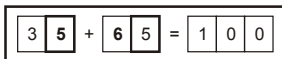
A cube has
6 — faces
8 — vertices
12 — edges

> ***All three*** *words must be correctly placed for the award of the mark.*
> *Accept any other clear way of indicating the correct words for the boxes, such as matching.*
> *Accept any reasonable spellings, provided the intention is clear.*

[1]

13. Missing digits completed as shown: 1

3 **5** + **6** 5 = 1 0 0

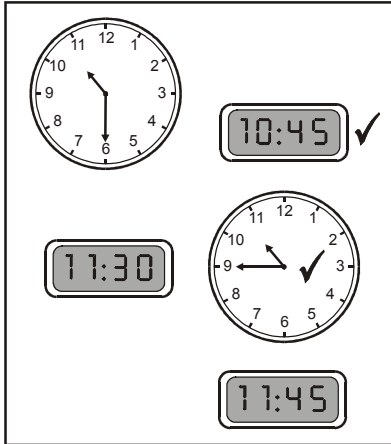> ***Both*** *digits must be correct for the award of the mark.*

[1]

14. Two clocks ticked as shown: 1

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

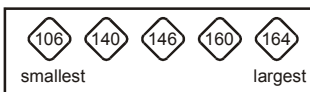*Accept any other clear way of indicating the correct clocks, such as circling.*

[1]

15. 28   1

[1]

16. Numbers written in order as shown: 1

Do not accept reverse order.

[1]

17. 39   1

[1]

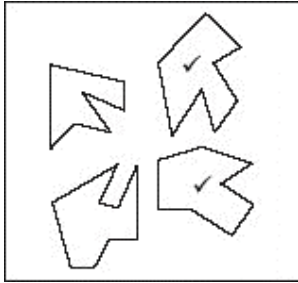**18.** Kylie   1

Accept any reasonable spelling, provided the intention is clear.
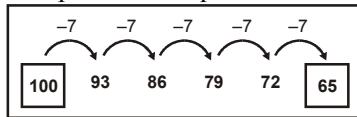
19. Two shapes ticked as shown: 1

> **Both** shapes must be correct for the award of the mark.
>
> *Accept any other clear way of indicating the correct two shapes, such as crosses or circling.*

[1]

20. Completes the sequence as shown: 1

> **Both** numbers must be correct for the award of the mark.

[1]

21. Number circled as shown: 1

> *Accept any other clear way of indicating the correct estimate, such as ticking the number.*

[1]

22. 6½cm **OR** 6.5cm **OR** equivalent.   1

> *Accept equivalent measurements, eg 65mm*
>
> *Accept an answer in the range 6.3cm–6.7cm*

[1]

23. Table completed as shown: 1

shape	number of right angles
	✎ ....**3**.........
	✎ ....**2**.........

> **Both** numbers must be correct for the award of the mark.

[1]

24. 80   1

[1]

25. Two letters ticked as shown: 1

D	**M**	**E**	**S**	**N**
✓	✓	✓	✓	✓

> ***Both*** *letters must be correct for the award of the mark.*
>
> ***Do not*** *award the mark if either S or N are ticked.*
>
> *Accept any other clear way of indicating the correct letters, such as 'Yes' or circling.*

[1]

26. Award **TWO** marks for all six different two-digit numbers given in any order. Up to 2
                                U2

25	27	52	57	72	75

> *Award both marks even if any numbers are duplicated in the list, provided all six different numbers are given.*
>
> ***Do not*** *accept 22 or 55 or 77 unless given in addition to the correct six numbers.*

If the answer is incorrect, award **ONE** mark for five different correct numbers.

[2]

27. (a) Table completed as shown: 1
                                U1

favourite big cat		number of children
cheetah		7
lion		22
tiger		13
panther		8
leopard		10
total		**60**

(b) Statements ticked **and** crossed as shown: 1

Nine more children voted for
the lion than for the leopard   ✘

The lion was more popular than the tiger.   ✓

$\frac{1}{4}$ of the children voted for the tiger.   ✘

> *All three* statements must be correct for the award of the mark.
>
> Accept any other clear way of indicating the correct responses, such as 'Y' and 'N'.
>
> **Do not** accept blanks.

[2]

28. Award **TWO** marks for the correct answer of £4.40   Up to 2

> *Accept £4.40p **OR** £4 40*

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

10p × 24 = £2.40
20p × 10 = £2.00
£2.40 + £2.00 = wrong answer
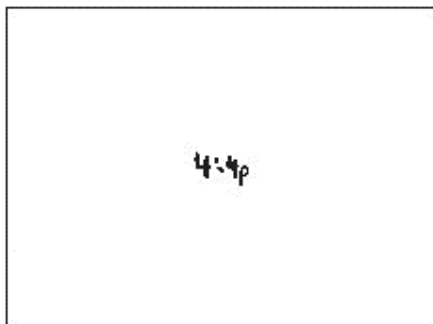
> *An answer must be given for the award of **ONE** mark.*

OR

award **ONE** mark for £440 **OR** £440p **OR** £4.4 as evidence of appropriate working which involves a complete and correct method.

[2]

Examples of responses

Peter has shown no working and has made an error with the notation of the units since he has omitted the 0 from £4.40. However, his answer of 4:4p can be accepted as evidence that he used a complete and correct method. He can be awarded the mark. Lucy has attempted to work out the value of the 10p coins using a correct method although she has incorrectly calculated this as 140p rather than 240p. She has also shown evidence that she intended to add ten 20p coins to this value. However, her method is not complete since she has not recorded an answer. She cannot be awarded the mark.
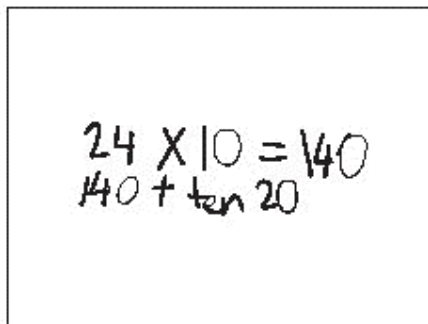
Peter	Lucy
4:4p	24 X 10 = 140 140 + ten 20
1 mark	**0 marks**

Freddie has clearly shown an appropriate method for calculating the value of the 10p coins, the 20p coins and their total value. Although he made an error in calculating the value of the 20p coins, his understanding of the problem is evident and his method is complete and correct. He can be awarded the mark. Stella's method, unlike Freddie's, is not correct since she has chosen an inappropriate operation, ie addition rather than multiplication, to calculate the value of each set of coins. Stella cannot be awarded the mark.

Freddie   **Stella**

**1 mark**   **0 marks**

Surjit has drawn number lines to represent the 10p coins and the 20p coins. To find the total amount, she has subdivided the number lines into blocks representing £1 but made an error in her final calculation. Her method shows each step taken and her method is complete and correct. Surjit can be awarded the mark. Julian too has used a counting on method. He has shown the correct number of 20p coins, then has shown 20 tally marks, which we can assume represent 10p coins. We can also assume from his answer that he has totalled the amounts. Julian's method is correct, but it is not complete since his tally has not represented the correct number of 10p coins. Julian cannot be awarded the mark.
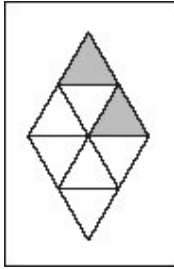
Surjit   **Julian**
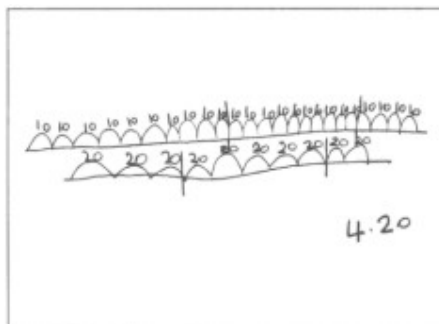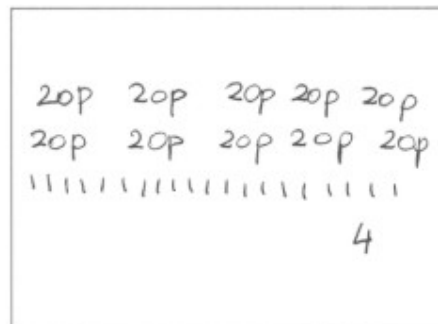
1 mark   **0 marks**

29. Any two of the eight triangles shaded, eg   1

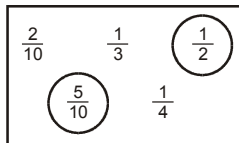   *Accept any other unambiguous indication of the correct fraction, such as four half-triangles shaded.*

[1]

30.   310   1

[1]

31. Circles two fractions as shown: 1

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

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

[1]