# Year 3 Maths Optional SAT Mark Scheme 

Paper A

1. Practice question - 35
2. 58 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.
4. Matches all three shapes as shown:


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.
5. 4
6. 90 p

Accept $£ 0.90$ p OR $£ 0$ 90p OR $£ .90 p$
Do not accept £90p OR 0.90p
7. 22
8. 57
(a) 6
(b) Graph completed as shown:

| The club we are in |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| recorder chess computer | 1 | 11 |  |  |  |  |  |
|  |  | 11 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 012 \\ & \\ & \\ & \text { Nun } \end{aligned}$ | $\begin{aligned} & 23 \\ & \text { Numb } \end{aligned}$ | $\begin{aligned} & 34 \\ & \text { nber } \end{aligned}$ | 5 |  |  | $\begin{aligned} & 3910 \\ & \text { ren } \end{aligned}$ |

The blocks need not be shaded. Accept any other clear way of indicating the correct number of blocks, such as ticking or circling.
10. Two numbers circled as shown:

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74 82 (77) }8
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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.
11. Diagram completed correctly as shown:

12. Diagram completed as shown:


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.
13. Missing digits completed as shown:

| 3 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | $\mathbf{|} 6 \mathbf{5}=$| 1 | 0 | 0 |
| :--- | :--- | :--- |

Both digits must be correct for the award of the mark.
14. Two clocks ticked as shown:


Both clocks must be ticked for the award of the mark.
Accept any other clear way of indicating the correct clocks, such as circling.
15. 28
16. Numbers written in order as shown:


Do not accept reverse order.
17. 39
18. Kylie

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


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.
20. Completes the sequence as shown:


Both numbers must be correct for the award of the mark.
21. Number circled as shown:


Accept any other clear way of indicating the correct estimate, such as ticking the number.
22. $61 / 2 \mathrm{~cm}$ OR 6.5 cm OR equivalent.

Accept equivalent measurements, eg 65 mm
Accept an answer in the range $6.3 \mathrm{~cm}-6.7 \mathrm{~cm}$
23. Table completed as shown:

| shape | number of right angles |
| :---: | :---: |
|  | $\ldots$ |

Both numbers must be correct for the award of the mark.
25. Two letters ticked as shown:


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

| 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.
27. (a) Table completed as shown:

| 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:

Nine more children voted for the lion than for the leopard

## $x$

The lion was more popular than the tiger.
$\frac{1}{4}$ of the children voted for the tiger.
$\boldsymbol{x}$

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.
28. Award TWO marks for the correct answer of $£ 4.40$

Up to 2

$$
\text { Accept } £ 4.40 \text { p OR } £ 440
$$

If the answer is incorrect, award ONE mark for evidence of appropriate working, eg
$10 \mathrm{p} \times 24=£ 2.40$
$20 \mathrm{p} \times 10=£ 2.00$
$£ 2.40+£ 2.00=$ wrong answer
An answer must be given for the award of ONE mark.

## OR

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

## 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 $4: 4 \mathrm{p}$ 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 10 p coins using a correct method although she has incorrectly calculated this as 140 p rather than 240 p. She has also shown evidence that she intended to add ten 20 p coins to this value. However, her method is not complete since she has not recorded an answer. She cannot be awarded the mark.


Freddie has clearly shown an appropriate method for calculating the value of the 10 p coins, the 20 p coins and their total value. Although he made an error in calculating the value of the 20 p 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.


Surjit has drawn number lines to represent the 10 p coins and the 20 p 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 20 p coins, then has shown 20 tally marks, which we can assume represent 10 p 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 10 p coins. Julian cannot be awarded the mark.


1 mark

Julian


0 marks
29. Any two of the eight triangles shaded, eg


Accept any other unambiguous indication of the correct fraction, such as four half-triangles shaded.
30. 310
31. Circles two fractions as shown:


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.

