Mark scheme

Q1.

Award **TWO** marks for a correct answer of 275

OR

an answer in the range from 270 to 280 inclusive.

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, e.g.

- 150 + 175 = 325
  600 − 325 =

OR

- 600 − 150 − 165 *(error)* =
  *Answer need not be obtained for the award of **ONE** mark.*
  Accept a reading in the range 170 to 180 ml inclusive for the second jug.
  *At least one of the measurements must be correct for the award of **ONE** mark.*

  Up to 2m

  [2]

Q2.

Award **TWO** marks for the correct answer of 1,048

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 1,793 + 8,728 = 10,521
  10,521 − 9,473

OR

- 9,473 − 8,728 = 745
  1,793 − 745

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

  Up to 2m

  [2]

Q3.

Award **TWO** marks for the correct answer of 750

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 450 × 2 = 900
  2,400 − 900 = 1,500

$1,500 \div 2$

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

Up to 2m

[2]

Q4.

50p   20p   10p   10p   10p

Coins may be given in any order.

U1

[1]

Q5.

6

1

8

1
U1

[2]

Q6.

Award **TWO** marks for the correct answer of 80p **OR** £0.80

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

■   £2.00 − £0.05 = £1.95

£5.00 − £2.25 = £2.75

£2.75 − £1.95 = wrong answer

Accept for ONE mark £80 OR £80p OR 0.80p as evidence of appropriate working.
Working must be carried through to reach an answer for the award of ONE mark.

Up to 2m

[2]

Q7.

(a)   Two numbers from the sequence that total 96, eg:

43 **AND** 53

OR

23 **AND** 73

Numbers may be given in either order.
*Accept negative numbers, eg −7 **AND** 103*

1

(b)   An explanation that recognises that adding three numbers ending in 3
       will produce a number ending in a 9 eg:

   ■   'They all end in 3 so adding three will give a number ending in 9'

   ■   'If you add three numbers in the sequence you will always get a
            number ending in 9'

   ■   'All the numbers are odd and 96 is even'
            Do not *accept vague or incomplete explanations, eg:*
            ■   *'All the numbers end in three'*
            ■   *'It only works with two numbers'*
            ■   *'3 odds add to make an even'*

U1

[2]

Q8.

(a)

A 50	**B** 15
C 20	**D** 25

1

(b)

A 110	**B** 45
C 50	**D** 55

U1

[2]

Q9.

Any two numbers which total 40, eg:

   ■   10 and 30

   ■   20 and 20

   ■   0 and 40

   ■   1 and 39

            Accept negative numbers and decimals.

[1]

Q10.

Award **TWO** marks for the correct answer of 75

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

- 30 × 50 = 1500
  1500 ÷ 20

OR

- 30 × 50p = £15
  5 20p coins make £1
  5 × 15

OR

- 50p ÷ 20p = 2.5
  30 × 2.5

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

Up to 2

[2]

Q11.

(a)   40p

1

(b)   Award **TWO** marks for the correct answer of 65p **OR** £0.65

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

120 + 35 = 155

155 – 90 = wrong answer

*Accept for **ONE** mark £65 **OR** £65p **OR** 0.65p as evidence of appropriate working.*
*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2

[3]

Q12.

Award **TWO** marks for the correct answer of 6

*Accept for **ONE** mark an answer of £6 as evidence of appropriate working.*

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

2.50 × 2 = 5

14 − 5 = 9

9 ÷ 1.50 = wrong answer

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

OR

14 − 2.50 − 2.50 = 9

1.50 × wrong number = 9

Up to 2

[2]

Q13.

(a)   5

1

(b)   15

> *If the answer is incorrect, award the mark if the answers to (a) and (b) total 20*

U1

[2]

Q14.

18 + 16 + 6

OR

18 + 14 + 8

OR

18 + 12 + 10

OR

16 + 14 + 10

> *Numbers may be given in any order.*

[1]

Q15.

(a)   £4.79

1

(b)   Award **TWO** marks for the correct answer of £2.35

 If the answer is incorrect, award **ONE** mark for evidence of
appropriate working, eg
2.50 ÷ 2 = 1.25
1.25 + 1.40 = 2.65
5 − 2.65 = wrong answer

*Accept for **ONE** mark £235 **OR** £235p as evidence of appropriate working.*

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

Up to 2

[3]

Q16.

(a)   7

Accept 7 r 55p.

Do not *accept 7 r 55*

1

(b)   Award **TWO** marks for the correct answer of £4.11

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg
4 × 3.79 = 15.16
8.95 + 15.16 = 24.11
24.11 – 20

*Accept for **ONE** mark £411 **OR** £411p as evidence of appropriate method.*

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

Up to 2

[3]

Q17.

Award **TWO** marks for the correct answer of 76

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg
44 × 2 = 88
88 – 12

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

Up to 2

[2]

Q18.

Award **TWO** marks for the correct answer of 55p **OR** £0.55

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg 8.75 – 7.65 = 1.10

1.10 ÷ 2 = wrong answer

*Accept: for **ONE** mark £55 OR £55p **OR** 0.55p as evidence of appropriate working.*

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

Up to 2

[2]

Q19.

   (a)

$$20 \;(+)\; 8 \;=\; 4 \;(\times)\; 7$$

                                                          1

   (b)

$$21 \;(\div)\; 3 \;=\; 15 \;(-)\; 8$$

                                                           1

                                                           [2]

Q20.

   (a)   42

                                                          1

   (b)   11

                                                          1

                                                           [2]

Q21.

Accept an explanation which recognises that consecutive or adjoining
shaded numbers have a difference of 9, eg
- 'You are adding 9 each time';
- 'The numbers are going up by 9 each time';
- 'The numbers go down by 9 each time';
- 'The rule is to add 10 and subtract 1';
- 'It is going down one in the units and up one in the tens'.

> ***Do not*** *accept an explanation that is vague or arbitrary, eg*
> - *'The numbers get bigger';*
> - *'The numbers get smaller';*
> - *'The rule is to go down 116, 125, 134, 143';*
> - *'The units are going down and tens are going up'.*
>
> ***Do not*** *accept:*
> - *'The numbers are multiples of 9'.*

                                                        U1

                                                           [1]

Q22.

4 written in the middle row box

and

800 written in the bottom right-hand box

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

[1]

Q23.

Digits written in boxes as shown:

4$\boxed{6}$4 + 38$\boxed{7}$ = 851

[1]

Q24.

Any two numbers such that Sara's number is thirteen greater than Leon's, eg

Leon 10   Sara 23

Accept decimals, fractions, negative numbers and zero.

[1]

Q25.

    (a)   width = 22

1

    (b)   height = 17

If the correct answers are transposed, award the mark for 16b only.

1

[2]

Q26.

    (a)   £4.30

*Accept 4.30 **OR** £4.30 **OR** 430p **OR** £4.30 **OR** 430 **OR** £4.30p.*

1

    (b)   (small) Mushroom AND (medium) Ham

     OR (small) Tuna AND (medium) Salami

Both must be correct.
Accept other unambiguous indications, eg:
- ***£4.50,   £5.50***
- ***£4.25,   £5.75***
- ***prices ringed in table***

1

[2]

Q27.

Explanation which recognises that the largest two-digit number (99) added to itself only gives a three-digit number (198), eg

- 'Because if you do 99 + 99 you only get a three-digit number';

- 'If you add any 2 two-digit numbers, you will get a three-digit number or a two-digit number'.

> *No mark is awarded for circling the 'Yes' alone.*
>
> ***Do not*** *accept vague or arbitrary explanations such as*
>
> - *'The numbers aren't big enough';*
> - *'It doesn't work'.*
>
> *If 'No' is circled but a correct unambiguous explanation is given then award the mark.*

[1]