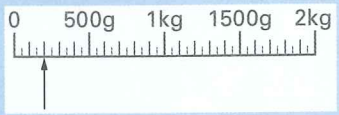
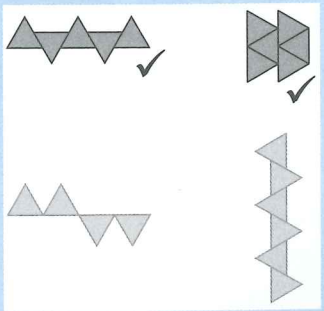
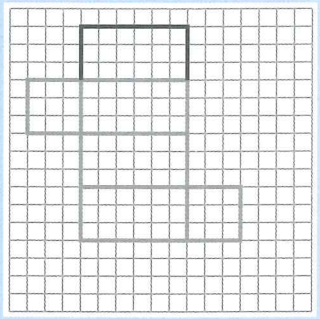
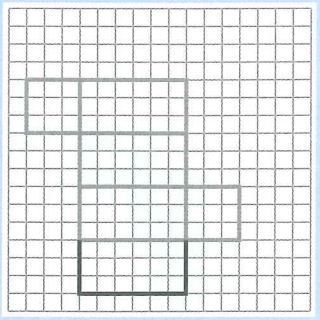
Mark scheme for Test 5A

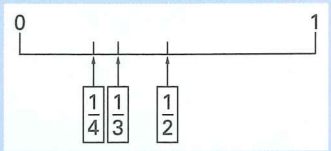
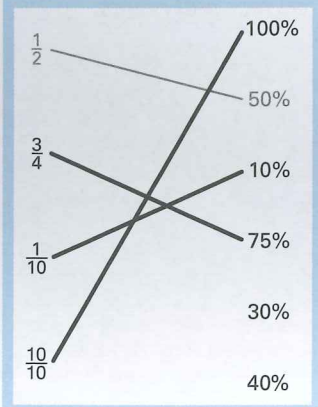
Test 5A questions 1–6

Question	Requirement	Mark	Additional guidance
1	969	1m	
2	Sentences completed as shown: The smallest number in the list is **1040** The largest number in the list is **1440**	1m	***Both*** *answers must be correct for the award of the mark.*
3	£6 **OR** £6.00	1m	*Accept £6.00p* ***OR*** *£6.00 pence* ***OR*** *£6-00* ***OR*** *£6:00* ***OR*** *£6 00* **Do *not*** *accept £600p* ***OR*** *£600*
4	Arrow drawn to 200g as shown: 	1m	*Arrow should be closer to 200g than 150g or 250g for the award of the mark.* *Accept any other clear way of indicating the correct point, such as a cross.*
5	Award **TWO** marks for the correct answer of 25 If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg 23 + 30 = 53 78 – 53 = wrong answer 'Supplementary marking guidance' on pages 39–40 shows some responses which are acceptable and unacceptable for the mark.	***Up to 2m***	*If both marks are awarded, record by entering 1 in each marking space.* *The working must be carried through to reach an answer for the award of* ***ONE*** *mark.* *Award* ***ONE*** *mark by entering 1, 0 in the marking spaces.*
6	Two patterns ticked as shown: 	1m	***Both*** *answers must be correct for the award of the mark.* *Accept any other clear way of indicating the correct two patterns, such as circling.*

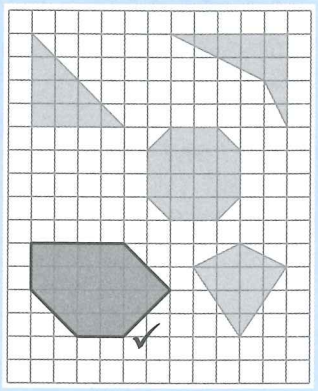
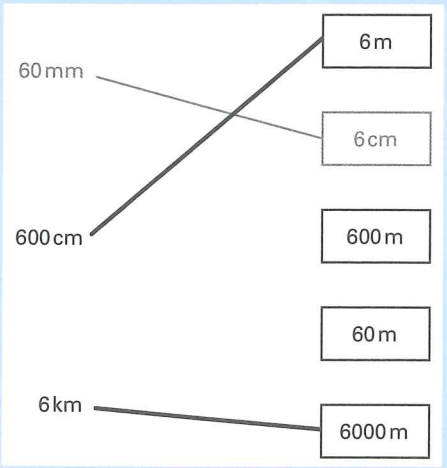
Test 5A questions 7–9

Question	Requirement	Mark	Additional guidance
7	137	1m	
8	Three numbers circled as shown: 7.5 8.5 **3.5** 9.5 2.5 **5.5** **4.5** 6.5	1m	***All three*** *numbers must be correct for the award of the mark.* *Accept any other clear way of indicating the correct numbers, such as ticking or underlining.*
9	Net completed as shown:  **OR** 	1m U1	*Accept slight inaccuracies in drawing, provided the intention is clear.* *Vertices must be within 2mm of the correct grid points.*

Test 5A questions 10–15

Question	Requirement	Mark	Additional guidance
10	Three numbers circled as shown: 11 **17** **25** 34 40 **49**	**1m**	***All three** numbers must be correct for the award of the mark.* *Accept any other clear way of indicating the correct numbers, such as ticking or underlining.*
11	Boxes completed as shown: 	**1m**	***All three** boxes must be correct for the award of the mark.*
12a	10	**1m**	*Accept answers between 9 hours 45 mins and 10 hours 15 mins exclusive.*
12b	3	**1m**	*Accept a correct list of names, Luke, Sam and Julian.*
13	All three fractions matched as shown: 	**1m**	***All three** lines must be drawn correctly for the award of the mark.* *Lines need not touch the numbers, provided the intention is clear.* ***Do not** accept fractions which have been matched to more than one percentage.*
14	Award **TWO** marks for the correct answer of £1.15 **OR** 115p If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg £5 – 40p = £4.60 £4.60 ÷ 4 = wrong answer 'Supplementary marking guidance' on page 41 shows some responses which are acceptable and unacceptable for the mark.	**Up to 2m**	*Accept £1.15p **OR** £1.15 pence **OR** £1-15 **OR** £1:15 **OR** £1 15 **OR** 115 **OR** 1.15* *If both marks are awarded, record by entering 1 in each marking space.* *Accept for **ONE** mark £115p **OR** £115 **OR** 1.15p **OR** £11.50p **OR** £11.50 as evidence of appropriate working.* *The working must be carried through to reach an answer for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.*
15	22	**1m**	

Test 5A questions 16–20

Question	Requirement	Mark	Additional guidance
16	74	**1m**	
17	22	**1m**	*Accept –22*
18	One shape ticked as shown: 	**1m**	*Accept any other clear way of indicating the correct shape, such as circling.*
19	Both lengths matched as shown: 	**1m**	***Both** lines must be matched correctly for the award of the mark.* *Lines do not have to touch the lengths or boxes, provided the intention is clear.* ***Do not** accept lengths which have been matched to more than one box.*
20a	Answer in the range 29°C to 29.9°C inclusive.	**1m**	
20b	4	**1m**	

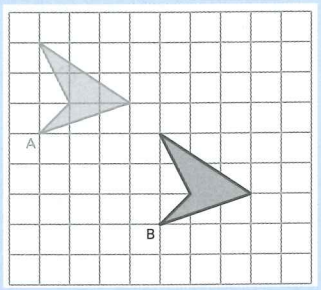
Test 5A questions 21–25

Question	Requirement	Mark	Additional guidance
21	21 **OR** 21st	**1m**	
22	16.11	**1m**	
23	Award **TWO** marks for the correct answer of 7 If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg 3 × 12 = 36 50 – 36 = 14 14 ÷ 2 = wrong answer 'Supplementary marking guidance' on page 42 shows some responses which are acceptable and unacceptable for the mark.	**Up to 2m** U1	*If both marks are awarded, record by entering 1 in each marking space.* *The working must be carried through to reach an answer for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.*
24	(6,7)	**1m** U1	*Coordinates must be in the correct order.* *Accept unambiguous answers written on the diagram.*
25	An explanation which compares the proportion of odd and even numbers on the spinner and dice, eg: ■ 'On the dice there are 3 odd and 3 even numbers. On the spinner there are 3 odd and 2 even numbers' ■ 'There is an extra even number on the dice'. **OR** An explanation which recognises that there are more odd than even numbers on the spinner **OR** that there is an equal number of odd and even numbers on the dice, eg: ■ 'Most of the numbers on the spinner are odd' ■ 'There are 3 odd numbers and 2 even numbers on the spinner' ■ 'There are only 2 even numbers on the spinner' ■ 'There are the same number of odd and even numbers on the dice'. 'Supplementary marking guidance' on pages 47–48 shows some responses which are acceptable and unacceptable for the mark.	**1m** U1	***Do not** award the mark for circling 'Yes' alone.* *If 'No' is circled but a correct unambiguous explanation is given, then award the mark.* ***Do not** accept an explanation that is vague or arbitrary, eg:* ■ *'The last number on the spinner is 5, but on the dice it is 6'* ■ *'The dice has one more number on it'.* ***Do not** accept an explanation that is ambiguous, eg:* ■ *'There are more odd numbers on the spinner'.*

Test 5A questions 26–27

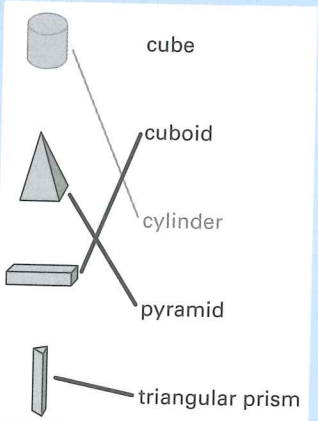
Question	Requirement	Mark	Additional guidance
26	Award **TWO** marks for the correct answer of 1344 If the answer is incorrect, award **ONE** mark for evidence of appropriate working which contains no more than **ONE** arithmetical error, eg: ■ Conventional algorithms, eg 56 × 24 224 1120 wrong answer **OR** ■ Grid methods, eg 50 6 20 1000 120 4 200 24 = wrong answer **OR** ■ Decomposition methods, eg 24 × 50 = 1200 24 × 6 = 144 1200 + 144 = wrong answer 'Supplementary marking guidance' on page 43 shows some responses which are acceptable and unacceptable for the mark.	***Up to 2m***	*If both marks are awarded, record by entering 1 in each marking space.* *For the award of **ONE** mark accept follow through of **ONE** error in working.* ***Do not** award any marks if:* ■ *The error is in the place value, for example the omission of the zero when multiplying by the 2 tens* ■ *The final (answer) line of digits is missing.* *Variations on algorithms are acceptable, provided they represent viable and complete methods.* *The working must be carried through to reach an answer for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.*
27	Award **TWO** marks for all three boxes completed correctly as shown: $2\frac{1}{2}$ **8** $13\frac{1}{2}$ **19** $24\frac{1}{2}$ **30** If the answer is incorrect, award **ONE** mark for any two boxes completed correctly.	***Up to 2m***	*If both marks are awarded, record by entering 1 in each marking space.* *Accept for **ONE** mark all three numbers lower than the correct answers by $\frac{1}{2}$, ie $7\frac{1}{2}$ $18\frac{1}{2}$ $29\frac{1}{2}$* *Accept for **ONE** mark all three numbers higher than the correct answers by $\frac{1}{2}$, ie $8\frac{1}{2}$ $19\frac{1}{2}$ $30\frac{1}{2}$* *Award **ONE** mark by entering 1, 0 in the marking spaces.*

Test 5A question 28

Question	Requirement	Mark	Additional guidance
28	Diagram completed as shown:  	1m	*Accept slight inaccuracies in drawing, provided the intention is clear.* *Vertices must be within 2mm of the correct grid points.* *The shape need not be shaded.*
Maximum 35 marks			

Mark scheme for Test 5B

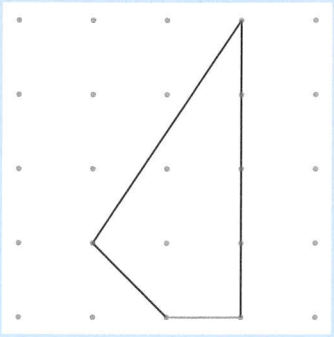
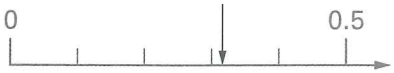
Test 5B questions 1–5

Question	Requirement	Mark	Additional guidance
1a	4	1m	
1b	250	1m	
2	Boxes completed as shown: 	1m	***All three*** *digits must be correct for the award of the mark.*
3	All three shapes matched as shown: 	1m	***All three*** *shapes must be matched correctly for the award of the mark.* *Lines need not touch the shapes or names exactly, provided the intention is clear.* ***Do not*** *accept shapes which have been matched to more than one name.*
4	£18.10	1m	*Accept £18.10p* ***OR*** *£18.10 pence* ***OR*** *£18-10* ***OR*** *£18:10* ***OR*** *£18 10* ***Do not*** *accept £1810* ***OR*** *£1810p* ***OR*** *£18.1*
5a	16	1m	
5b	39	1m	

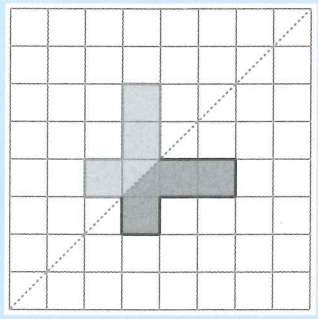
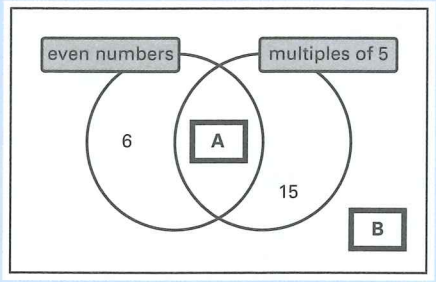
Test 5B questions 6–9

Question	Requirement	Mark	Additional guidance
6	Boxes completed as shown: There are **32** sweets in a bag. **6** friends share them equally. Each friend gets **5** sweets. **2** sweets are left over. **OR** There are **32** sweets in a bag. **5** friends share them equally. Each friend gets **6** sweets. **2** sweets are left over.	1m U1	***All four** boxes must be correct for the award of the mark.*
7	One answer circled as shown: $\frac{1}{4}$ hour $\frac{1}{2}$ hour **$\frac{3}{4}$ hour** 1 hour more than 1 hour	1m	*Accept any other clear way of indicating the correct answer, such as ticking or underlining.*
8	Grid completed as shown: **74** 76 **86**	1m U1	***Both** numbers must be correct for the award of the mark.* *Disregard any additional numbers written elsewhere on the diagram.*
9	350	1m	

Test 5B questions 10–12

Question	Requirement	Mark	Additional guidance
10	Diagram completed as shown: 	**1m**	*Accept slight inaccuracies in drawing, provided the intention is clear.* *Vertices must be within 2mm of the correct grid points.*
11	Arrow drawn in the range 62mm to 66mm inclusive, measured from zero mark. 	**1m**	*The arrow need not touch the line, provided the intention is clear.* *Accept other any other way of indicating the correct point, such as a cross.*
12	Boxes completed as shown: 100 [=] 10 × 10 100 [>] 15 × 5 100 [<] 20 × 6	**1m**	***All three** answers must be correct for the award of the mark.*

Test 5B questions 13–16

Question	Requirement	Mark	Additional guidance
13	Diagram completed as shown: 	**1m**	*Accept slight inaccuracies in drawing, provided the intention is clear.* *Vertices must be within 2mm of the correct grid points.* *The shape need not be shaded.*
14	Boxes completed as shown:  Box A: any multiple of 10, eg 10, 50, 120 **AND** Box B: any number ending in a 1, 3, 7 or 9	**1m**	***Both** answers must be correct for the award of the mark.* *If answers are written in the answer boxes, disregard any additional numbers written elsewhere on the diagram.* *If no answers are written in the answer boxes, accept correct answers written in the relevant two regions of the diagram provided that all numbers written in the two regions are correct.*
15	One number circled as shown: 4 (5) 6 7 8	**1m** U1	*Accept any other clear way of indicating the correct number, such as ticking or underlining.*
16	One answer circled as shown: $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\left(\frac{1}{6}\right)$	**1m**	*Accept any other clear way of indicating the correct answer, such as ticking or underlining.*

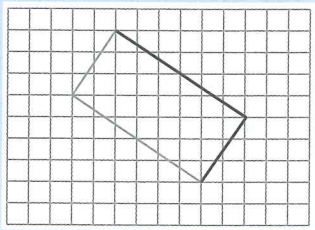
Test 5B question 17

Question	Requirement	Mark	Additional guidance
17a	£2.70 **OR** 270p	1m	*Accept £2.70p **OR** £2.70 pence **OR** £2-70 **OR** £2:70 **OR** £2 70 **OR** 2.70 **OR** 270* ***Do not** accept £270 **OR** £270p **OR** 2.7 **OR** 2.70p*
17b	Award **TWO** marks for the correct answer of 150g If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg 80p for 100 grams 40p for 50 grams 100 + 50 **OR** 120 ÷ 80 = 1.5 1.5 × 100 **OR** A 'trial and improvement' method, eg 80p for 100g 240p for 300g 160p for 200g 'Supplementary marking guidance' on page 44 shows some responses which are acceptable and unacceptable for the mark.	Up to 2m	*If both marks are awarded, record by entering 1 in each marking space.* *An answer need not be given for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.* *A 'trial and improvement' method must show evidence of improvement, but a final answer need not be given for the award of **ONE** mark.*

Test 5B question 18

Question	Requirement	Mark	Additional guidance
18	An explanation which recognises that if the last digit of a number is odd, then the number must be odd (and vice versa), eg: ■ 'If it is odd the number is odd' ■ 'If the last number is an odd number, eg 7, the number is odd' ■ 'If the last number is a 1, 3, 5, 7 or 9 it is odd' ■ 'If it is a 0, 2, 4, 6 or 8 the number is even' ■ 'If the last number is a multiple of 2 the number is even'. **OR** An explanation which uses an example to illustrate that a number is odd if its last digit is odd (and vice versa), eg: ■ '45 is odd because the last number is odd' ■ '74 is even because the 4 is even'. **OR** An explanation, with evidence, which recognises that digits other than the last digit have no effect on a number being odd or even, eg: ■ 'Tens are even, so only the units matter'. 'Supplementary marking guidance' on pages 49–50 shows some responses which are acceptable and unacceptable for the mark.	1m U1	***Do not*** *award the mark for circling 'Yes' alone.* *If 'No' is circled but a correct unambiguous explanation is given, then award the mark.* ***Do not*** *accept an explanation where an incomplete list of odd digits is given but the intention appears to be to provide a complete list, eg:* ■ *'If the last number is a 1, 3, 5 or 7 it is odd'.* ***Do not*** *accept an explanation with an example that fails to demonstrate why the number is odd or even, eg:* ■ *'45 is odd'.* ***Do not*** *accept an explanation that provides no evidence that other digits have no effect, eg:* ■ *'The other digits don't make any difference, only the last one does'* ■ *'The unit is the digit that tells you if a number is odd or even'.*

Test 5B questions 19–25

Question	Requirement	Mark	Additional guidance
19	Answer boxes completed as shown: 5 5 × 2 0 **OR** 5 0 × 2 2 **OR** 4 4 × 2 5	**1m**	*Accept numbers written in either order.* ***Do not** accept an answer that includes a 3-digit number.*
20	Rectangle completed as shown: 	**1m**	*Accept slight inaccuracies in drawing, provided the intention is clear.* *Vertices must be within 2mm of the correct grid points.*
21	Three numbers circled as shown: (4) 7 24 (25) (36) 40	**1m**	***All three** numbers must be circled for the award of the mark.* *Accept any other clear way of indicating the correct numbers, such as ticking or underlining.*
22	15	**1m** U1	
23a **23b**	14 $\frac{8}{40}$ **OR** $\frac{1}{5}$	**1m** **1m**	*Accept equivalent fractions, decimals or percentages, eg 0.2 or 20%*
24	12	**1m**	***Do not** accept 12%*
25	Award **TWO** marks for the correct answer of 22 If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg 80 – 7 – 7 = 66 66 ÷ 3 'Supplementary marking guidance' on page 45 shows some responses which are acceptable and unacceptable for the mark.	**Up to 2m** U1	*If both marks are awarded, record by entering 1 in each marking space.* *An answer need not be given for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.*

Test 5B questions 26–27

Question	Requirement	Mark	Additional guidance
26	Award **TWO** marks for the correct answer of 107° If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg 34 + 39 = 73 180 – 73 'Supplementary marking guidance' on page 46 shows some responses which are acceptable and unacceptable for the mark.	**Up to 2m**	*If both marks are awarded, record by entering 1 in each marking space.* *An answer need not be given for the award of **ONE** mark.* *Award **ONE** mark by entering 1, 0 in the marking spaces.*
27a	500 **AND** 600	**1m**	*Accept numbers in either order.*
27b	45 **AND** 55	**1m**	*Accept numbers in either order.*
Maximum 35 marks			