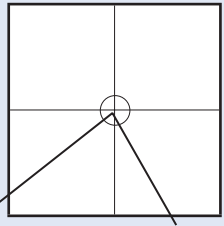
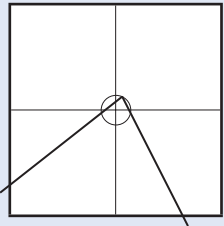
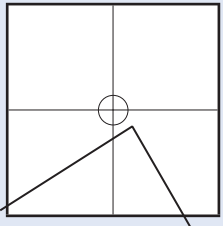


What if...	Marking procedure	
<i>The pupil's response is numerically or algebraically equivalent to the answer in the mark scheme.</i>	Markers should award the mark unless the mark scheme states otherwise.	
<i>The pupil's response does not match closely any of the examples given.</i>	Markers should use their judgement in deciding whether the response corresponds with the statement of the requirements given in the 'Correct response' column. Refer also to the 'Additional guidance'.	
<i>The pupil has responded in a non-standard way.</i>	Calculations, formulae and written responses do not have to be set out in any particular format. Pupils may provide evidence in any form as long as its meaning can be understood. Diagrams, symbols or words are acceptable for explanations or for indicating a response. Any correct method of setting out working, however idiosyncratic, should be accepted. Provided there is no ambiguity, condone the continental practice of using a comma for a decimal point.	
<i>There appears to be a misreading affecting the working.</i>	This is when the pupil misreads the information given in the question and uses different information without altering the original intention or difficulty level of the question. For each misread that occurs, deduct one mark only.	
<i>No answer is given in the expected place, but the correct answer is given elsewhere.</i>	Where a pupil has shown understanding of the question, the mark(s) should be given. In particular, where a word or number response is expected, a pupil may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.	
<i>The final answer is wrong, but the correct answer is shown in the working.</i>	Where appropriate, detailed guidance will be given in the mark scheme and must be adhered to. If no guidance is given, markers will need to examine each case to decide whether:	
	<ul style="list-style-type: none"> the incorrect answer is due to a transcription error 	If so, award the mark.
	<ul style="list-style-type: none"> in questions not testing accuracy, the correct answer has been given but then rounded or truncated 	If so, award the mark.
	<ul style="list-style-type: none"> the pupil has continued to give redundant extra working which does not contradict work already done 	If so, award the mark.
<ul style="list-style-type: none"> the pupil has continued, in the same part of the question, to give redundant extra working which does contradict work already done. 	If so, do not award the mark. Where a question part carries more than one mark, only the final mark should be withheld.	
<i>The pupil's answer is correct but the wrong working is shown.</i>	A correct response should always be marked as correct unless the mark scheme states otherwise.	

What if...	Marking procedure
<i>The pupil has made a conceptual error.</i>	<p>In some questions, a method mark is available provided the pupil has made a computational, rather than conceptual, error. A computational error is a 'slip' such as writing $4 \times 6 = 18$ in an otherwise correct long multiplication. A conceptual error is a more serious misunderstanding of the relevant mathematics; when such an error is seen, no method marks may be awarded. Examples of conceptual errors are:</p> <ul style="list-style-type: none"> • misunderstanding of place value, such as multiplying by 2 rather than 20 when calculating 35×27 • subtracting the smaller value from the larger in calculations such as $45 - 26$ to give the answer 21 • incorrect signs when working with negative numbers.
<i>The correct response has been crossed or rubbed out and not replaced.</i>	Any legible crossed or rubbed out work that has not been replaced should be marked according to the mark scheme. If the work is replaced, then crossed or rubbed out work should not be considered.
<i>More than one answer is given.</i>	If all answers given are correct (or a range of answers is given, all of which are correct), the mark should be awarded unless prohibited by the mark scheme. If both correct and incorrect responses are given, no mark should be awarded.
<i>The pupil's answer correctly follows through from earlier incorrect work.</i>	Follow-through marks may be awarded only when specifically stated in the mark scheme, but should not be allowed if the difficulty level of the question has been lowered. Either the correct response or an acceptable follow-through response should be marked as correct.
<i>The answer is correct but, in a later part of the question, the pupil has contradicted this response.</i>	A mark given for one part should not be disallowed for working or answers given in a different part, unless the mark scheme specifically states otherwise.
<i>The pupil's accuracy is marginal according to the overlay provided.</i>	Overlays can never be 100% accurate. However, provided the answer is within or touches the boundaries given, the mark(s) should be awarded.
<i>The pupil has drawn lines which do not meet at the correct point.</i>	<p>Markers should interpret the phrase 'lines not accurate' to mean meeting within or on a circle of radius 2mm with centre at the correct point.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>within the circle accepted</p> </div> <div style="text-align: center;">  <p>on the circle accepted</p> </div> <div style="text-align: center;">  <p>outside the circle not accepted</p> </div> </div>

Responses involving money

	✓ Accept	✗ Do not accept
<p>Where the £ sign is given</p> <p>for example: £3.20, £7</p>	<p>✓ £3.20 £7 £7.00</p> <p>Any unambiguous indication of the correct amount, eg £3.20p £3 20 pence £3 20 £3,20 £3-20 £3:20 320p with £ sign crossed out</p>	<p>✗ Incorrect placement of pounds or pence, eg £320 £320p</p> <p>Incorrect placement of decimal point, or incorrect use or omission of 0, eg £3.2 £3 200 £32 0 £3-2-0</p>
<p>Where the p sign is given</p> <p>for example: 40p</p>	<p>✓ 40p</p> <p>Any unambiguous indication of the correct amount, eg £0.40p £.40p £0.40 with p sign crossed out</p>	<p>✗ Incorrect or ambiguous use of pounds or pence, eg 0.40p £40p</p>
<p>Where no sign is given</p> <p>for example: £3.20, 40p</p>	<p>✓ £3.20 320p 40p £0.40</p> <p>Any unambiguous indication of the correct amount in £ or p as shown above</p> <p>At levels 3 and 4 only also accept omission of units, eg 3.20 320 40 0.40</p>	<p>✗ Omission of final zero, eg 3.2 0.4</p>

Responses involving negative numbers

	✓ Accept	✗ Do not accept
<p>For example: -2</p>		<p>To avoid penalising the error below more than once within each question, do not award the mark for the <i>first</i> occurrence of the error within each question. Where a question part carries more than one mark, only the final mark should be withheld.</p> <p>✗ Incorrect notation, eg 2-</p>

Responses involving time

	✓ Accept	✗ Do not accept
A time interval for example: 2 hours 30 minutes	✓ 2 hours 30 minutes Any unambiguous, correct indication, eg 2½ hours 2.5 hours 2h 30 2h 30 min 2 30 Digital electronic time, ie 2:30	✗ Incorrect or ambiguous time interval, eg 2.3 hours 2.3h 2h 3 2.30 min 2.30 2-30 2,30 2.3
A specific time for example: 8:40am, 17:20	✓ 8:40am 8:40 twenty to nine Any unambiguous, correct indication, eg 08.40 8.40 0840 8 40 8-40 8,40 Unambiguous change to 12 or 24 hour clock, eg 17:20 as 5:20pm or 17:20pm	✗ Incorrect time, eg 8.4am 8.40pm Incorrect placement of separators, spaces, etc or incorrect use or omission of 0, eg 840 8:4:0 8.4 084 84

Responses involving measures

	✓ Accept	✗ Do not accept
Where units are given (eg kg, m, l) for example: 8.6kg	✓ 8.6kg Any unambiguous indication of the correct measurement, eg 8.60kg 8.6000kg 8kg 600g	✗ Incorrect or ambiguous use of units, eg 8600kg

Note

If a pupil leaves the answer box empty but writes the answer elsewhere on the page, then that answer must be consistent with the units given in the answer box and the conditions listed above.

If a pupil changes the unit given in the answer box, then their answer must be equivalent to the correct answer, using the unit they have chosen, unless otherwise indicated in the mark scheme.

Responses involving coordinates

	✓ Accept	✗ Do not accept
<p>For example: (5, 7)</p>	<p>✓ Unconventional notation, eg (05, 07) (five, seven)</p> <p>$\begin{matrix} x & y \\ (5, & 7) \end{matrix}$</p> <p>$(x=5, y=7)$</p>	<p>✗ Incorrect or ambiguous notation, eg (7, 5)</p> <p>$\begin{matrix} y & x \\ (7, & 5) \end{matrix}$</p> <p>$(5x, 7y)$</p> <p>$(5^x, 7^y)$</p> <p>$(x-5, y-7)$</p>

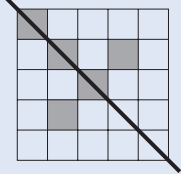
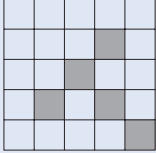
Responses involving probability

	✓ Accept	! Take care ✗ Do not accept
<p>A numerical probability should be expressed as a decimal, fraction or percentage only.</p> <p>for example:</p> <p>0.7 $\frac{7}{10}$ 70%</p>	<p>✓ Equivalent decimals, fractions and percentages, eg 0.700</p> <p>$\frac{70}{100}$</p> <p>$\frac{35}{50}$</p> <p>70.0%</p> <p>✓ A probability correctly expressed in one acceptable form which is then incorrectly converted, but is still less than 1 and greater than 0, eg</p> <p>$\frac{70}{100} = \frac{18}{25}$</p>	<p>The first four categories of error below should be ignored if accompanied by an acceptable response, but should not be accepted on their own. However, to avoid penalising the first three types of error below more than once within each question, do not award the mark for the <i>first</i> occurrence of each type of error unaccompanied by an acceptable response. Where a question part carries more than one mark, only the final mark should be withheld.</p> <p>! A probability that is incorrectly expressed, eg 7 in 10 7 over 10 7 out of 10 7 from 10</p> <p>! A probability expressed as a percentage without a percentage sign.</p> <p>! A fraction with other than integers in the numerator and/or denominator.</p> <p>! A probability expressed as a ratio, eg 7:10 7:3 7 to 10</p> <p>✗ A probability greater than 1 or less than 0</p>

Responses involving the use of algebra



	✓ Accept	! Take care ✗ Do not accept
<p>For example:</p> <p>$2 + n$</p> <p>$n + 2$</p> <p>$2n$</p> <p>$\frac{n}{2}$</p> <p>n^2</p>	<p>✓ Unambiguous use of a different case or variable, eg N used for n x used for n</p> <p>✓ Words used to precede or follow equations or expressions, eg $t = n + 2$ tiles or tiles = $t = n + 2$ for $t = n + 2$</p> <p>✓ Unambiguous letters used to indicate expressions, eg $t = n + 2$ for $n + 2$</p>	<p>! Unconventional notation, eg $n \times 2$, or $2 \times n$, or $n2$ or $n + n$ for $2n$ $n \times n$ for n^2 $n \div 2$ for $\frac{n}{2}$ or $\frac{1}{2}n$ $2 + 1n$ for $2 + n$ $2 + 0n$ for 2</p> <p>Within a question that demands simplification, do not accept as part of a final answer involving algebra. Accept within a method when awarding partial credit, or within an explanation or general working.</p> <p>✗ Embedded values given when solving equations, eg in solving $3x + 2 = 32$, $3 \times 10 + 2 = 32$ for $x = 10$</p> <p>To avoid penalising the two types of error below more than once within each question, do not award the mark for the <i>first</i> occurrence of each type within each question. Where a question part carries more than one mark, only the final mark should be withheld.</p> <p>! Words or units used within equations or expressions, eg n tiles + 2 n cm + 2</p> <p>Do not accept on their own. Ignore if accompanying an acceptable response.</p> <p>✗ Ambiguous letters used to indicate expressions, eg $n = n + 2$ for $n + 2$</p>

Tier & Question					Mark	Correct response	Additional guidance	Dishes
3–5	4–6	5–7	6–8	2				
a					1m	£11		
b					2m or 1m	£2.50 Gives the answer 2.5 or 250 or Shows the value 7.5(0) or 750 or Shows or implies a complete correct method with not more than one computational error eg <ul style="list-style-type: none"> • $1.50 + 2.50 + 3.50 = 7.00$ (error) Answer given as 3		
c					1m	Gives a correct pair of colours, in any order, ie Green and Orange or Blue and Red	✓ Unambiguous indication of colour eg <ul style="list-style-type: none"> • G and O • B and R ! Response gives costs rather than colours Withhold 1 mark only for the first occurrence. Allow costs given in pence eg <ul style="list-style-type: none"> • 1.50 and 3(.00) • 2(.00) and 2.50 • 150 and 300 • 200 and 250 Mark as 0, 1	
					1m	Gives a correct pair of colours, other than any previously credited		
					U1			

Tier & Question						Five squares	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
3							
a				1m	Draws the correct line of symmetry, ie 	! Line not ruled, accurate or extended Accept lines of at least 3 diagonals in length provided the pupil's intention is clear	
b				1m	Completes the diagram correctly, ie 	! Squares not shaded Accept provided indication of squares is unambiguous	

Tier & Question						Javelin	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
4							
a				1m	16 to 18 inclusive		
b				1m	4		
c				1m	17 to 19 inclusive		

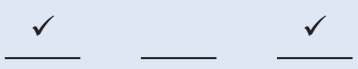
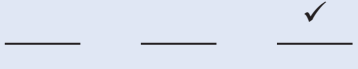
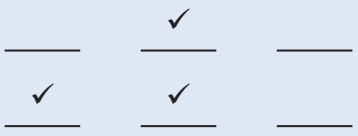
Tier & Question						Digit cards
3–5	4–6	5–7	6–8	Mark	Correct response	
5						
				1m	Gives four of the digits to make a correct calculation eg <ul style="list-style-type: none"> • $7 + 8 = 15$ • $5 + 6 = 11$ • $9 + 9 = 18$ 	<p>! Zero used at the end of a number eg, for the first mark • $2 + 8 = 10$ Penalise only the first occurrence</p> <p>* Zero used or card left blank at the beginning of a two-digit number eg, for the second mark, do not accept • $2 \times 3 = 06$</p> <p>* Card left blank at the end of a number eg, for the third mark, do not accept • $2 - 1 = 1$</p> <p>* Extra digit inserted eg, for the fourth mark, do not accept • $36 \div 2 = 18$</p>
				1m	Gives four of the digits to make a correct calculation eg <ul style="list-style-type: none"> • $6 \times 7 = 42$ • $7 \times 5 = 35$ • $9 \times 9 = 81$ 	
				1m	Gives five of the digits to make a correct calculation eg <ul style="list-style-type: none"> • $23 - 4 = 19$ • $67 - 5 = 62$ • $24 - 2 = 22$ 	
				1m	Gives four of the digits to make a correct calculation eg <ul style="list-style-type: none"> • $14 \div 2 = 7$ • $24 \div 4 = 6$ • $36 \div 6 = 6$ 	
				(U1)		

Tier & Question						Heights
3–5	4–6	5–7	6–8	Mark	Correct response	
6						
a				1m	Indicates 1.8 metres, ie 	
b				1m	Indicates 7 metres, ie 	

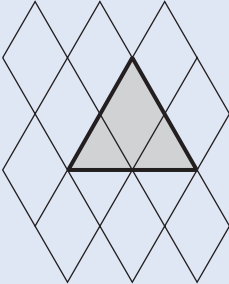
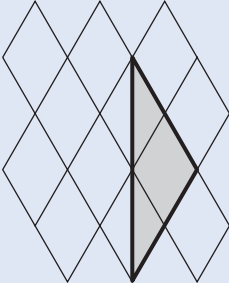
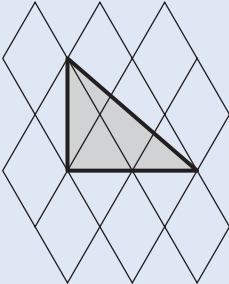
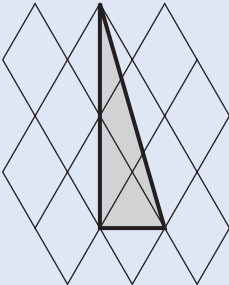
Tier & Question						Change															
3–5	4–6	5–7	6–8	Mark	Correct response		Additional guidance														
7																					
a				1m	3																
b				2m	Completes all three rows of the table correctly in any order eg <ul style="list-style-type: none"> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Number of 50p coins</th> <th>Number of 20p coins</th> <th>Number of 10p coins</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>0</td> </tr> <tr> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>2</td> <td>1</td> <td>4</td> </tr> <tr> <td>2</td> <td>0</td> <td>6</td> </tr> </tbody> </table> 	Number of 50p coins	Number of 20p coins	Number of 10p coins	2	3	0	2	2	2	2	1	4	2	0	6	✓ Cell that should contain zero left blank
Number of 50p coins	Number of 20p coins	Number of 10p coins																			
2	3	0																			
2	2	2																			
2	1	4																			
2	0	6																			
				or 1m	Completes two rows of the table correctly																

Tier & Question						Doctors
3–5	4–6	5–7	6–8	Mark	Correct response	
8	1					
a	a			1m	Gives a value between 49 and 53 inclusive	✓ Value qualified eg, for part (a) <ul style="list-style-type: none"> About 50
b	b			1m	Gives a value between 23 and 27 inclusive	
c	c			1m	Gives a possible reason eg <ul style="list-style-type: none"> They might think their doctor's treatment is sometimes very good, but not at other times They might not think that any of the possible answers is what they think They don't have a doctor They might not want to comment They could be worried about giving an opinion They may have only ever had one doctor They don't always see the same doctor 	✓ Minimally acceptable reason eg <ul style="list-style-type: none"> Could be sometimes one category and sometimes another They may not like the choices If they're not sure They don't see their doctor very often They have just got a new doctor Not relevant They don't want to answer They can't tell what is meant by good ✗ Incomplete reason eg <ul style="list-style-type: none"> They don't know

Tier & Question						Using tens	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
9	2						
				1m	$\div 10$! Correct operation indicated, but 10 omitted eg, for the first mark • \div Penalise only the first occurrence	
				1m	$\div 10 \longrightarrow - 10$		
				1m	$+ 10 \longrightarrow \div 10$		

Tier & Question						Card shape	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
10	3						
				2m	Indicates only the three correct shapes, ie  	✓ Unambiguous indication eg • ✓ for yes and ✗ for no ! For 1 mark, response indicates only the three shapes showing the grey side of the shape, eg  Condone	
				or 1m	Indicates any two of the correct shapes with the third incorrect or omitted or Indicates the three correct shapes with not more than one other incorrect		

Tier & Question						Number lines	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
11	4						
				1m	Gives both the values 2 and 8 in the correct positions	! Follow-through from their -4 Accept the sum of their -4 and 10 provided their -4 is a negative number	
				1m	Gives the value -4 in the correct position		
				1m	Gives the value (+)6 in the correct position		

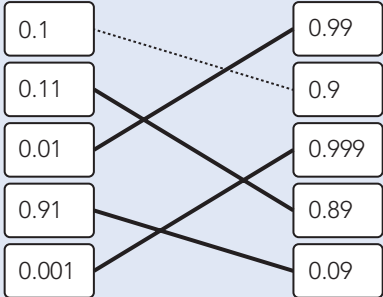
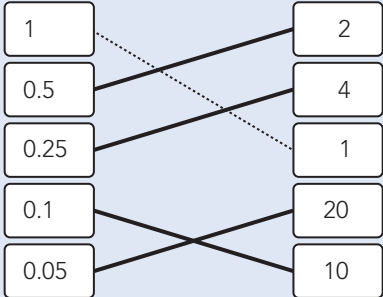
Tier & Question						Rhombus grid
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
12	5					
a	a			1m	12	
b	b			1m	<p>Draws a correct triangle eg</p> <ul style="list-style-type: none"> •  •  •  •  	<p>! Lines not ruled or accurate, or triangle not shaded Accept provided the pupil's intention is clear</p> <p>! Vertices of triangle not on the intersections of the grid Accept vertices within 2mm of the intersections of the grid</p> <p>! Other shapes drawn As these may be trials, ignore</p>

Tier & Question						Missing digits	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
13	6						
				1m	Completes the second calculation correctly, ie $\boxed{1} \boxed{7} \times 3 = \boxed{5} \boxed{1}$! Both digits placed in the same box eg • $\boxed{17} \boxed{} \times 3 = \boxed{5} \boxed{1}$ Condone	
				1m	Completes the third calculation correctly, ie $\boxed{1} \boxed{4} \times 3 = \boxed{4} \boxed{2}$		
					or $\boxed{1} \boxed{5} \times 3 = \boxed{4} \boxed{5}$		
					or $\boxed{1} \boxed{6} \times 3 = \boxed{4} \boxed{8}$		
					(U1)		

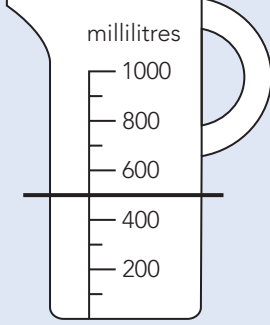
Tier & Question						Clocks	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
14	7						
a	a			1m	10am	! Indication of am or pm incorrect or omitted Condone omission of am or pm but do not accept incorrect times eg, for part (a) accept • 10 (o'clock) eg, for part (a) do not accept • 10pm • 22:00 eg, for part (b) accept • 6 (o'clock) • 18:00 eg, for part (b) do not accept • 6am • 06:00	
b	b			1m	6pm		

Tier & Question						Sum of 80
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
15	8					
				1m	Indicates Set A and gives a correct explanation eg <ul style="list-style-type: none"> • $A = 74$ and $80 - 74 = 6$ $B = 90$ and $90 - 80 = 10$ • A is $-3, -2, -1, (0)$ and B is $+1, +2, +3, +4$, so A is only 6 less than 80, but B is 10 more 	✓ Minimally acceptable explanation eg <ul style="list-style-type: none"> • 6 and 10 seen • 74 and 90 seen • $(-3, (-2), (-1), (0)$ and 1, 2, 3, 4 seen ✗ Incomplete or incorrect explanation eg <ul style="list-style-type: none"> • A adds up to 74 • B is 10 more than 80 • A adds up to 74, B adds up to 110 • 17, 18 and 19 are all under 20 so A is smaller
				U1		

Tier & Question						Number chains
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
16	9					
a	a			1m	Gives the values 14 and 41 in the correct positions	
b	b			1m	Shows a correct rule eg <ul style="list-style-type: none"> • $\times 3$ • Multiply by 3 • Triple • $\times 3$ then $+ 0$ 	✓ Minimally acceptable rule eg <ul style="list-style-type: none"> • Add the number 3 times • Add on double itself • Double then add the number • It's the next power of 3 • $3\times$! Rule embedded or shown in working Accept provided a correct rule is shown explicitly, even if an incorrect value for the next number in the chain is shown on the answer line eg, accept <ul style="list-style-type: none"> • 81×3 seen • $(4 - 1) \times 81$ eg, do not accept <ul style="list-style-type: none"> • $81 + 81 + 81$ • $81 \times 2 + 81$ ✗ Incomplete or incorrect rule eg <ul style="list-style-type: none"> • 3 • +54 • $3n$

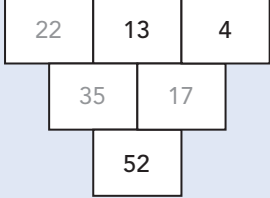
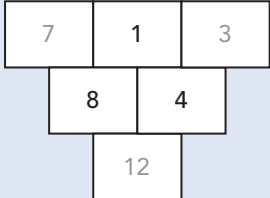
Tier & Question						Making 1	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
17	10	1					
a	a	a		2m	Joins all four pairs of numbers correctly, ie 	<p>✗ Number matched to more than one other For 2m or 1m, do not accept as a correct match</p>	
				or 1m	Joins at least two pairs of numbers correctly		
b	b	b		2m	Joins all four pairs of numbers correctly, ie 		
				or 1m	Joins at least two pairs of numbers correctly		

Tier & Question						T-shirts	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
18	11	2					
a	a	a		1m	$\frac{1}{5}$ or equivalent probability		
b	b	b		1m	$\frac{2}{3}$ or equivalent probability	<p>! Value rounded Accept 0.66(...) or 0.67 or the percentage equivalents</p>	
c	c	c		1m	$\frac{1}{3}$ or equivalent probability	<p>! Value rounded Accept 0.33(...) or the percentage equivalent</p>	

Tier & Question						Water
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
19	12	3				
				1m	Indicates the value 500 on the jug, ie 	✓ Unambiguous indication ! Inaccurate indication Accept provided the pupil's intention is clear
					(U1)	

Tier & Question						Boxes
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
20	13	4				
				2m or 1m	90 Shows or implies a complete correct method with not more than one computational error eg <ul style="list-style-type: none"> • $72 \div 4 = 16$ (error) $72 + 16 = 88$ • $72 \div 4 = 18$ $18 \times 5 = 80$ (error) 	
					(U1)	

Tier & Question						Percentages
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
21	14	5				
a	a	a		1m	18	! Throughout the question, incorrect use of % sign eg <ul style="list-style-type: none"> • 18% 54% Penalise only the first occurrence
b	b	b		1m	54	! For part (b) follow-through Accept follow-through as their (a) $\times 3$, or as $36 +$ their (a) provided the result is less than 360

Tier & Question				Number grids		
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
22	15	6				
				1m	Completes the first grid correctly, ie 	
				1m	Completes the second grid correctly, ie 	
					U1	

Tier & Question				Angles in a triangle		
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance
23	16	7				
				3m	Gives all three correct angles, ie $x = 90$ $y = 20$ $z = 20$	
				or		
				2m	Gives any two correct angles or Gives $x = 90$ and $y = z$, provided this value is < 90 and > 0	
				or		
				1m	Gives any one correct angle or Gives $y = z$, provided this value is < 90 and > 0	

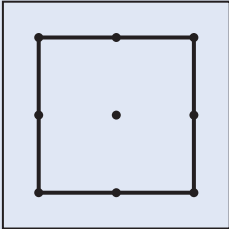
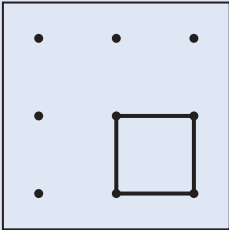
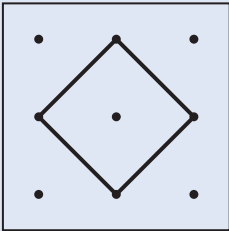
Tier & Question				Mark	Correct response	Additional guidance	Finding <i>b</i>
3–5	4–6	5–7	6–8				
24	17	8					
				<p>2m or 1m</p> <p>2</p> <p>Shows or implies that $a = 5$ and shows the intention to substitute this value into the second equation eg</p> <ul style="list-style-type: none"> $5 + 7 = 10 + b$ $b = 12 - 10$ <p>or</p> <p>Shows a complete correct method with not more than one computational error eg</p> <ul style="list-style-type: none"> $b = 11 - 6 + 7 - 10$ $a = 11 - 6 = 6$ (error) $\begin{aligned} 6 + 7 &= 10 + b \\ b &= 3 \end{aligned}$	<p>✗ Conceptual error eg</p> <ul style="list-style-type: none"> $a = 11 + 6 = 17$ 		

Tier & Question				Mark	Correct response	Additional guidance	Matching
3–5	4–6	5–7	6–8				
18	9	1					
				<p>1m</p> <p>Matches both instructions on the left to the equivalent instruction on the right, ie</p>	<p>✗ Instruction on the left matched to more than one instruction on the right</p>		

Tier & Question							School shop	
3–5	4–6	5–7	6–8	1	Mark	Correct response	Additional guidance	
a				1m	19			
b				1m	Friday		✓ Unambiguous indication eg, for part (b) <ul style="list-style-type: none"> • F eg, for part (c) <ul style="list-style-type: none"> • R 	
c				1m	Ruler			
					(U1)			

Tier & Question							Missing numbers	
3–5	4–6	5–7	6–8	2	Mark	Correct response	Additional guidance	
				1m	26			
				1m	3			

Tier & Question							Parcels	
3–5	4–6	5–7	6–8	3	Mark	Correct response	Additional guidance	
				2m or 1m	£ 6.10			
				1m	Gives the answer 6.1			
					or			
					Shows the value 3.9(0) or 390			
					or			
					Shows a complete correct method with not more than one computational error			
					eg			
					<ul style="list-style-type: none"> • $1.3(0) \times 3 = 3.6(0)$ (error), $10 - 3.6(0) = 6.4(0)$ 			

Tier & Question				Mark	Correct response	Additional guidance	Joining
3–5	4–6	5–7	6–8				
4							
				2m	<p>Draws all three different sized squares, in any order eg</p> <ul style="list-style-type: none">  	<p>! Lines not ruled or accurate Accept provided the pupil's intention is clear</p> <p>! Internal lines shown Only the outline of any shape drawn should be considered</p> <p>✗ Vertices of square do not use the pins</p>	
							
							
				or 1m	Draws any two of the three different sized squares		
				U1			

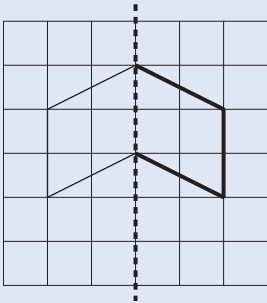
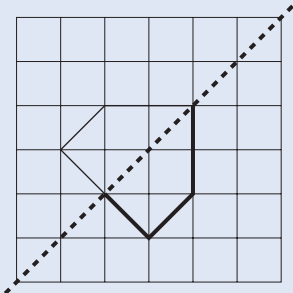
Tier & Question							Spinner											
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance												
5																		
				2m	Makes all four correct decisions, ie <table border="0" style="margin-left: 20px;"> <tr> <td>True</td> <td>False</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	True	False	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	✓ Unambiguous indication eg • ✓ for True, ✗ for False		
True	False																	
<input checked="" type="checkbox"/>	<input type="checkbox"/>																	
<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
<input checked="" type="checkbox"/>	<input type="checkbox"/>																	
			or 1m	Makes three correct decisions														

Tier & Question							Fractions	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance		
6								
a				1m	Indicates any three squares	! Squares not shaded Accept any unambiguous indication ! Part squares indicated Accept provided the pupil's intention is clear		
b				1m	$\frac{3}{5}$ or equivalent	✗ Equivalent decimals		

Tier & Question						Number of sides	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
7							
				2m	Matches all three shapes correctly, ie		
				or 1m	Matches any two shapes correctly	<p>! Shape matched to more than one number For 2m or 1m, do not accept as a correct match</p> <p>! Extra shapes added Ignore extra shapes and any lines drawn from them</p>	

Tier & Question						Grid	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
8							
				2m	Completes the grid correctly, ie		
				or 1m	Completes both the middle column and the bottom row correctly		
				U2			

Tier & Question				Mark	Correct response	Additional guidance	Digital
3–5	4–6	5–7	6–8				
9				1m	10:45	<p>! Indication of am or pm Condone either am or pm shown or implied eg, accept</p> <ul style="list-style-type: none"> • 10:45 am • 22:45 <p>! Words and numbers used in description Condone, provided the time has been interpreted correctly eg, accept</p> <ul style="list-style-type: none"> • 5 past 10 <p>x 'Digital time' described in words eg</p> <ul style="list-style-type: none"> • Ten O five <p>x Description of time incorrect or using numbers eg</p> <ul style="list-style-type: none"> • Ten five • 10 5 	
				1m	Gives a correct description of the time in words eg <ul style="list-style-type: none"> • Five past ten 		

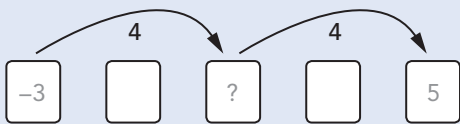
Tier & Question				Mark	Correct response	Additional guidance	Reflecting
3–5	4–6	5–7	6–8				
10	1			1m	Reflects the shape correctly in the mirror line, ie 	<p>! Throughout the question, lines not ruled or accurate Accept provided the pupil's intention is clear</p> <p>! Throughout the question, extra lines drawn Accept provided the pupil's intention is clear</p>	
				1m	Reflects the shape correctly in the mirror line, ie 		

Tier & Question						Test
3–5	4–6	5–7	6–8	Mark	Correct response	
12	2					
a	a			1m	C	
b	b			1m	21	
				U1		

Tier & Question						Rounding
3–5	4–6	5–7	6–8	Mark	Correct response	
13	3					
a	a			1m	2700	
				1m	3000	
b	b			1m	Gives a value greater than or equal to 795 but less than 805	✓ 800

Tier & Question						Castle
3–5	4–6	5–7	6–8	Mark	Correct response	
11	4					
				2m	£ 5(.00)	
				or 1m	Shows the value 22(.00)	
					or	
					Shows or implies a complete correct method with not more than one computational error	
					eg	
					• 12.00 (error) + 9 = 21.00	
					Answer given as 4.00	

Tier & Question						Baby	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
14	5						
a	a			1m	4	✗ Any reference to extra days	
b	b			1m	9	✗ Any reference to extra weeks or days	

Tier & Question						Count on	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
15	6						
a	a			1m	27		
b	b			2m or 1m	1 Shows or implies that the size of two steps is 4 eg <ul style="list-style-type: none"> •  • $-3 + 4$ or Shows or implies that the size of one step is 2 eg <ul style="list-style-type: none"> • The gaps are 2 • $-3 + 2$ • Second number is -1 • Fourth number is 3 • -3 to 5 is 8, $8 \div 4$ 	✗ Shows steps of unequal size	

U1

Tier & Question						Shoe sizes
3–5	4–6	5–7	6–8	Mark	Correct response	
16	7					
a	a			1m	12	
b	b			1m	3	
c	c			1m	<p>Indicates Both the same and gives a correct explanation</p> <p>The most common correct explanations:</p> <p>Use given values eg</p> <ul style="list-style-type: none"> • Range of boys is 4, range of girls is 4 • 8 – 4 is the same as 9 – 5 • 5 to 9 = 4 to 8 <p>Reason generally about spread eg</p> <ul style="list-style-type: none"> • Boys cover 5 sizes, girls cover 5 sizes 	<p>✓ Minimally acceptable explanation eg</p> <ul style="list-style-type: none"> • 4, 4 • 8 – 4, 9 – 5 • Both 4 <p>! Ambiguous notation eg</p> <ul style="list-style-type: none"> • 4 – 8, 5 – 9 <p>Condone</p> <p>✓ Minimally acceptable explanation eg</p> <ul style="list-style-type: none"> • Both have the same number of sizes <p>! Explanation implies references to the number of blank sizes eg</p> <ul style="list-style-type: none"> • Boys have one blank, girls have one blank • Because the girls didn't have size 9 and the boys didn't have size 4 <p>Condone</p> <p>✗ Ambiguous or incorrect explanation eg</p> <ul style="list-style-type: none"> • 5 in each • They both have a range of five sizes • Girls: 4, 5, 6, 7, 8 • Boys: 5, 6, 7, 8, 9

U1

Tier & Question						Finding x and y	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
17	8			1m	652		
				1m	442		

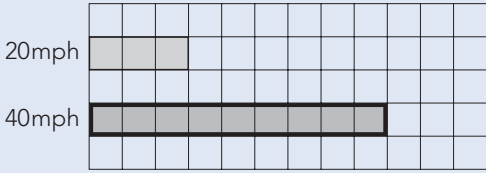
Tier & Question						Seventy	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
18	9			1m	<p>Indicates No and gives a correct explanation that shows or implies at least one odd factor</p> <p>eg</p> <ul style="list-style-type: none"> Factors of 70 are 1, 2, 5, 7, 10, 14, 35 and 70, so some are odd and some are even There are four odd factors and four even factors of 70 It could be 1 (odd) $5 \times 14 = 70$ $70 \div 2 = 35$ 70 is even, but 1 is odd and goes into everything 	<p>✓ Minimally acceptable explanation</p> <p>eg</p> <ul style="list-style-type: none"> 1, 2, 5, 7, 10, 14, 35 and 70 7 <p>! Incomplete list of factors given</p> <p>Condone, provided none is incorrect and at least one odd factor is shown</p> <p>eg, accept</p> <ul style="list-style-type: none"> The factors of 70 are 1, 2, 5 and 7 <p>✗ Incomplete or incorrect explanation</p> <p>eg</p> <ul style="list-style-type: none"> 70 has some odd and some even factors 70 is a factor of 1 All factors of 70 are odd 	
					(U1)		

Tier & Question						Units
3–5	4–6	5–7	6–8	Mark	Correct response	
20	10	1				
				2m	Completes all five rows of the table correctly, ie	
				or	Completes at least three rows of the table correctly	

	L	A	V	M
cm	✓			
l			✓	
miles	✓			
g				✓
m ²		✓		
oz				✓

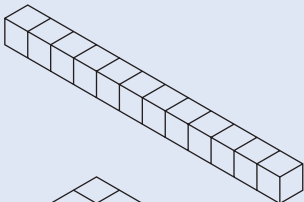
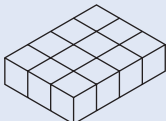
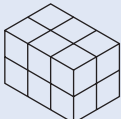
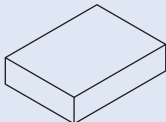
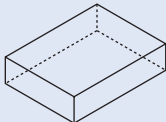
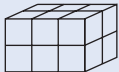
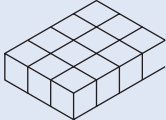
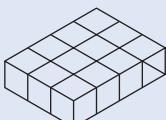
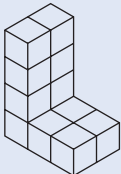
Tier & Question						Rainforest
3–5	4–6	5–7	6–8	Mark	Correct response	
19	11	2				
a	a	a		1m	27	
b	b	b		1m	175 to 185 inclusive	
c	c	c		1m	Indicates January, ie	

Tier & Question				Mark	Correct response	Additional guidance	Doughnuts
3–5	4–6	5–7	6–8				
21	12	3					
				2m	<p>Indicates shop A and gives a correct justification, based on correctly calculating a pair of comparable values eg</p> <ul style="list-style-type: none"> At shop A: $2 \times 5 = 10$, at shop B: $3.5(0) \times 3 = 10.5(0)$ $3.5 \times 3 - 2 \times 5 = 0.5$ $2 \div 3 = 0.6(\dots)$, $3.50 \div 5 = 0.7$ For £1 you get $1\frac{1}{2}$ doughnuts or $1\frac{3}{7}$ doughnuts You pay £1.50 extra for 2 more doughnuts, but at shop A they're less than 75p each so shop A must be a better deal 	<p>✗ For 2m, no decision</p> <p>✓ For 2m, correct decision and any pair of comparable values shown Note that common pairs (in pounds) are: 10 and 10.5(0) (per 15 doughnuts) 0.6(...) and 0.7(0) (per 1 doughnut) 2 and 2.1(0) (per 3 doughnuts) 3.3(...) and 3.5(0) (per 5 doughnuts) 1.5 and 1.4(...) (doughnuts per pound)</p> <p>! For 2m or 1m, comparison is per 3 doughnuts or per 5 doughnuts but the given price is not restated Condone eg, for 2m accept • At shop B, 3 doughnuts would be £2.10</p> <p>! Additional incorrect working Ignore</p>	
				<p>or</p> <p>1m Shows a correct pair of comparable values but makes either an incorrect or no decision</p> <p>or</p> <p>Shows a complete correct method for finding a pair of comparable values with not more than one computational or rounding error, and follows through to make their correct decision eg</p> <ul style="list-style-type: none"> $5 \times 2, 3 \times 3.50$, shop A indicated $2 \div 3 = 0.75$ (error), $3.50 \div 5 = 0.7$, shop B indicated <p>or</p> <p>Makes a correct decision but the justification uses only the difference between a pair of comparable values eg</p> <ul style="list-style-type: none"> A doughnut is 3.3(...)p cheaper at shop A 			

Tier & Question						Stopping distances	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
22	13	4					
a	a	a		1m	Draws a bar for the stopping distance for 40mph of length 9cm, ie 	! Bar incorrectly positioned Condone if bar is drawn correctly one line above or below the position shown	
b	b	b		1m	18	! Follow-through Allow follow-through as $2 \times$ the length of their bar in (a), provided the result is greater than 12	

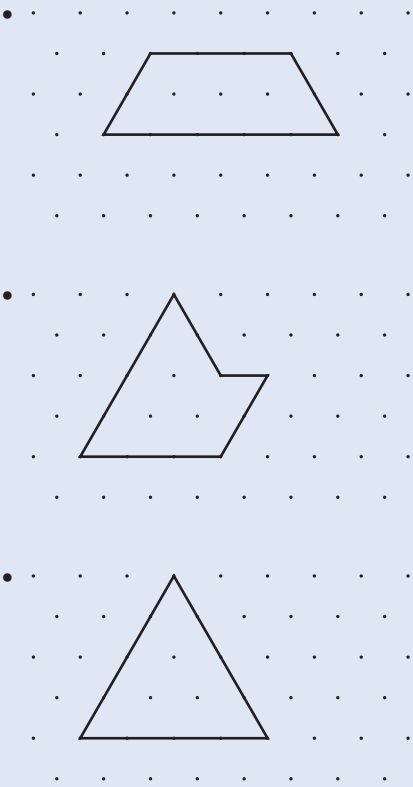
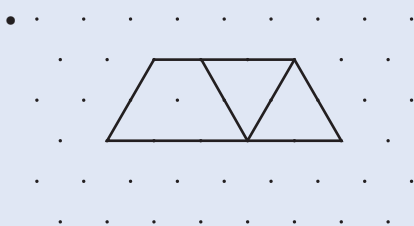
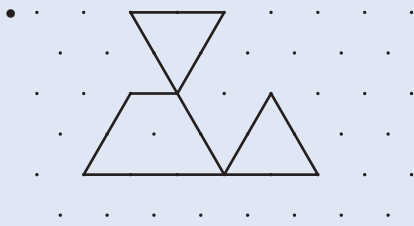
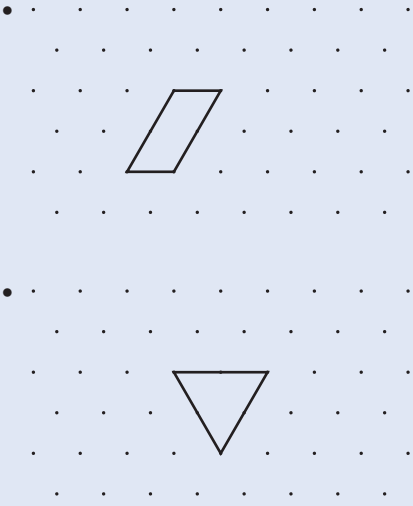
Tier & Question				Marking overlay available		Rotate 180	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
23	14	5					
				2m or 1m	Draws the correct shape with all four vertices within the tolerances as shown on the overlay Shows at least three vertices within the tolerances as shown on the overlay or Shows a correct shape in the correct orientation, with all four vertices within the tolerances as shown on the overlay, but in an incorrect position on the grid	! Lines not ruled or accurate Accept provided the pupil's intention is clear	

Tier & Question						Value	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
24	15	6					
				1m	196	✗ Incomplete processing	
				1m	4		
				1m	1225		

Tier & Question				Mark	Correct response	Additional guidance	12 cubes
3–5	4–6	5–7	6–8				
25	16	7					
				2m	<p>Draws a 1 by 1 by 12, a 1 by 3 by 4 or a 2 by 2 by 3 cuboid, using the isometric grid eg</p> <ul style="list-style-type: none">    	<p>✗ 1 by 2 by 6 cuboid repeated</p> <p>✓ For 2m or 1m, internal lines omitted eg, for 2m accept</p> <ul style="list-style-type: none">  <p>! For 2m or 1m, hidden lines shown For 2m, accept provided they are clearly indicated as hidden lines eg, for 2m accept</p> <ul style="list-style-type: none">  <p>! Lines not ruled Accept provided the pupil's intention is clear</p> <p>! Drawing not accurate Accept vertices within 2mm of the dots of the grid</p> <p>✗ Isometric grid not used correctly eg</p> <ul style="list-style-type: none">  <p>! Other shapes drawn As these could be trials, ignore</p>	
				or 1m	<p>The only error is to omit some external lines or to show some hidden lines eg</p> <ul style="list-style-type: none">   <p>or</p> <p>Correctly draws a possible 3-D shape made from 12 cubes that is not a cuboid, using the isometric grid eg</p> <ul style="list-style-type: none">  		

Tier & Question						Cost of delivery	
3–5	4–6	5–7	6–8	Mark	Correct response	Additional guidance	
26	17	8					
a	a	a		1m	Gives both correct values correctly positioned, ie 7 then 20	✓ Range given instead of 20 eg • 0 – 20	
				1m	Gives a correct value with the correct unit for that value eg • 25p • 25 pence • £0.25		
b	b	b		1m	18.25		

Shape area

Tier & Question				Mark	Correct response	Additional guidance
3–5	4–6	5–7	6–8			
27	18	9				
a	a	a		1m	<p>Gives a shape with area $a + 2b$, ie 16 small triangles eg</p> 	<p>! Lines not ruled or accurate Accept provided the pupil's intention is clear</p> <p>✓ Internal lines shown eg, for part (a)</p>  <p>✗ Shape formed with triangles and trapezium not joined side to side eg, for part (a)</p>  <p>! Other shapes drawn As these could be trials, ignore</p>
b	b	b		1m	<p>Gives a shape with area $a - b$, ie 4 small triangles eg</p> 	

U1