

YEAR 2

MATHEMATICS

Termly Assessment Tests

Guidance and mark schemes

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Guidance and mark schemes for mathematics: Year 2

Contents	Page
About this pack	4
● Using the termly assessment tests	4
About the tests	5
● Aural questions	5
Test coverage	6
Marking and assessing the papers	7
● Interpreting answers	7
Written methods for addition and subtraction	9
National standard in maths	10
Aural questions	11
Mark scheme: Test A	12
● Paper 1	12
● Paper 2	13
Mark scheme: Test B	17
● Paper 1	17
● Paper 2	18
Mark scheme: Test C	21
● Paper 1	21
● Paper 2	22

About this pack

This pack provides you with termly assessment tests to help support children with the Key Stage 1 Mathematics test. The pack consists of this introductory booklet (including mark schemes) and assessment tests covering a wide range of content taken from the Key Stage 1 programme of study.

Using the termly assessment tests

The tests in this pack can be used as you would any other assessment materials. The children need to be familiar with specific test-focused skills, such as ensuring equipment functions properly, leaving questions if they seem too difficult, working at a suitable pace for the tests and checking through their work.

These tests are short at only 20 or 35 minutes per paper, as they are testing the degree of competence children have. The tests do not have to be completed within the times given since the ability to answer questions at pace is not part of Key Stage 1 assessment.

About the tests

Each maths test has two papers:

- Paper 1: arithmetic – these are context-free calculations. The children have approximately 20 minutes to answer the questions. 25 marks are available. A practice question is provided at the start of the paper.
- Paper 2: reasoning – these are mathematical reasoning problems both in context and out of context. The children have approximately 35 minutes to answer the questions. 35 marks are available. A practice question is provided at the start of the paper and then followed by five aural questions.

The papers should be taken in order and children may have a break between papers. Neither paper should be strictly timed. You should ensure that every child has enough time to demonstrate what he or she understands, knows and can do, without prolonging the test inappropriately. Use your judgement to decide when, or if, children need breaks during the assessment, and whether to stop the test early if appropriate.

Do the practice question for each test together and ensure the children write their answer in the correct place.

All of the tests broadly increase in difficulty as they progress, and it is not expected that all children will be able to answer all of the questions. All questions can be read aloud so that reading ability does not affect a child's ability to demonstrate their mathematical skills.

The marks available for each question are shown in the answer booklet next to each question and are also shown next to each answer in the mark scheme.

Aural questions



There are five aural questions in paper 2. They are shown by this symbol. These questions should be read aloud following the script on page 13 of this booklet.

Test coverage

The test content is divided into strands and sub-strands. These are listed, for each question, in a table on the back cover of every test to allow tracking of difficulties. In a small number of cases, where practical equipment such as containers would be required, these aspects are not tested.

Strand	Sub-strand
Number and place value	counting (in multiples)
	read, write, order and compare numbers
	identify, represent and rounding
	number problems
Addition, subtraction, multiplication and division (calculations)	add/subtract mentally
	add/subtract using written methods
	use inverses and check
	add/subtract to solve problems
	multiply/divide mentally
	multiply/divide using written methods
	solve problems based on all four operations and knowledge of the commutative facts
	order operations
Fractions	recognise, find, write, name and count fractions
	equivalent fractions
Measurement	compare, describe and order measures
	measure and read scales
	money
	telling time, ordering time and units of time
	solve mathematical problems involving measures
Geometry – properties of shape	recognise and name common shapes
	describe properties and classify shapes
	draw and make shapes and relate 2D and 3D shapes
Geometry – position and direction	patterns
	describe position, direction and movement
Statistics	interpret and represent data
	solve problems involving data

Marking and assessing the papers

The mark schemes and answers are located towards the end of this booklet.

The mark schemes provide details of correct answers including guidance for questions that have more than one mark.

Interpreting answers

Problem	Guidance
Digit has been written in reverse.	A reversed digit is acceptable if it is clearly recognisable as the digit intended. For example, a reversed 2 must clearly show the characteristics of a 2 rather than a 5.
The number has been transposed in the answer.	Transposed numbers should not be awarded the mark. For example, an answer of '16' when the correct answer is '61' should not be marked as correct.
The answer is equivalent to the one in the mark scheme.	The mark scheme will generally specify which equivalent responses are allowed. If this is not the case, award the mark unless the mark scheme states otherwise. For example: $1\frac{1}{2}$ or 1.5
The answer is correct but the wrong working is shown.	Always award the mark(s) for a correct response unless the mark scheme states otherwise.
The correct response has been crossed (or rubbed) out and not replaced.	Do not award the mark(s) for legible crossed-out answers that have not been replaced or that have been replaced by a further incorrect attempt.
The answer has been worked out correctly but an incorrect answer has been written in the answer box.	Give precedence to the answer given in the answer box over any other workings. There may be cases where the incorrect answer is due to a transcription error. You may check the child's intention and decide whether to award the mark.
More than one answer is given.	If all answers given are correct (or a range of answers is given, all of which are correct), award the mark unless the mark scheme states otherwise. If both correct and incorrect responses are given, do not award the mark unless the mark scheme states otherwise.

Problem	Guidance
<p>There appears to be a misread of numbers affecting the working.</p>	<p>In general, the mark should not be awarded. However, in two-mark questions that have a working mark, award one mark if the working is applied correctly using the misread numbers, provided that the misread numbers are comparable in difficulty to the original numbers. For example, if '243' is misread as '234', both numbers may be regarded as comparable in difficulty.</p>
<p>No answer is given in the expected place, but the correct answer is given elsewhere.</p>	<p>Where a child has shown understanding of the question, award the mark. In particular, where a word or number response is expected, a child may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.</p>

Written methods for addition and subtraction

The following guidance shows some written methods suitable for Key Stage 1.

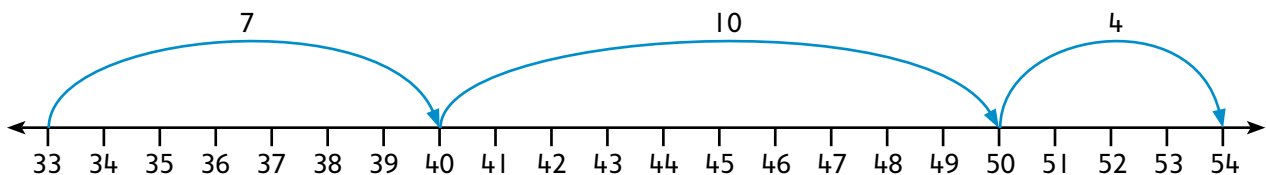
Addition

$$\begin{aligned}25 + 34 &= 20 + 5 + 30 + 4 \\ &= 20 + 30 + 5 + 4 \\ &= 50 + 9 \\ &= 59\end{aligned}$$

$$\begin{array}{r} 25 \\ + 34 \\ \hline 59 \end{array} = \begin{array}{r} 20 + 5 \\ 30 + 4 \\ \hline 50 + 9 \end{array}$$

Subtraction

$$54 - 33$$



$$54 - 33 = 7 + 10 + 4 = 21$$

$$\begin{array}{r} 54 \\ - 33 \\ \hline 21 \end{array} = \begin{array}{r} 50 + 4 \\ 30 + 3 \\ \hline 20 + 1 \end{array}$$

National standard in maths

The mark that each child gets in the test paper will be known as the 'raw score' (for example, '37' in 37/60). The raw score will be converted to a scaled score and children achieving a scaled score of 100 or more will achieve the National Standard in that subject. These 'scaled scores' enable results to be reported consistently year-on-year.

The guidance in the table below shows the marks that children need to achieve to reach the National Standard. This should be treated as a guide only, as the number of marks may vary. You can also find up-to-date information about scaled scores on our website: www.scholastic.co.uk/nationaltests

Marks achieved	Standard
0–35	Has not met the national standard in mathematics for KS I
36–60	Has met the national standard in mathematics for KS I

Aural questions

Explain to the children that you will read aloud some questions for them to answer. Tell them that you will read each question twice only, leaving a short gap in-between. Tell the children that they must listen very carefully when you read the questions.

Do the practice question together. Check that the children have written the answer in the box. Read aloud questions 1 to 5 and repeat the question (the bold text only). Tell the children that they must work on their own and they must not call out the answers.

Remember to repeat the question. Repeat the bold text only. At the end of each question, allow sufficient time for the children to complete what they can.

TEST A, PAPER 2

Practice question: **What is 5 add 4?** Write your answer in the box.

1. **What is 19 add 6?** Write your answer in the box.
2. **Join the shapes to their names.**
3. **Look at the thermometer. What temperature is shown?** Write your answer in the box.
4. **This tally chart shows the fruit the children like to eat. How many children like oranges?** Write your answer in the box.
5. **Circle one third of the buttons below.** Write your answer in the box.

TEST B, PAPER 2

Practice question: **What is 65 subtract 20?** Write your answer in the box.

1. **What is the total of three, four, and seven?** Write your answer in the box.
2. **Mark Jamie's homework. Put a tick if the answer is correct. Put a cross if the answer is incorrect.** Write your answer in the boxes.
3. **Here are some fractions. Join these to the correct shaded shape.**
4. **Draw lines to match the times to the clocks. One has been done to help you.**
5. **Look at the ruler. What length is shown by the arrow?** Write your answer in the box.

TEST C, PAPER 2

Practice question: **How many caterpillars are there?** Write your answer in the box.

1. **What is fourteen plus five?** Write your answer in the box.
2. **Arrange the numbers in order, from smallest to largest.** Write one number on each line.
3. **How much does the apple weigh?** Write your answer in the box.
4. **Tick the hexagon.**
5. **If Mr Turner eats two squares of this chocolate bar, what fraction of the bar will he eat?** Write your answer in the box.

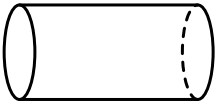
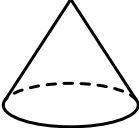
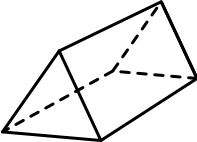
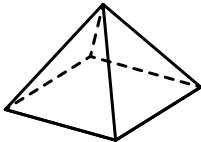
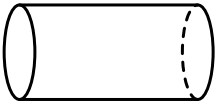
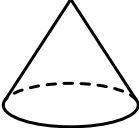
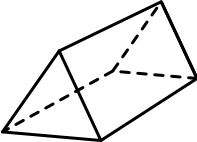
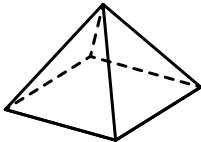
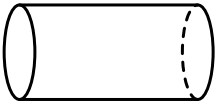
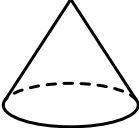
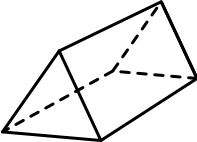
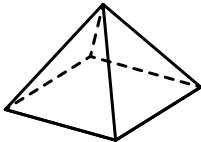
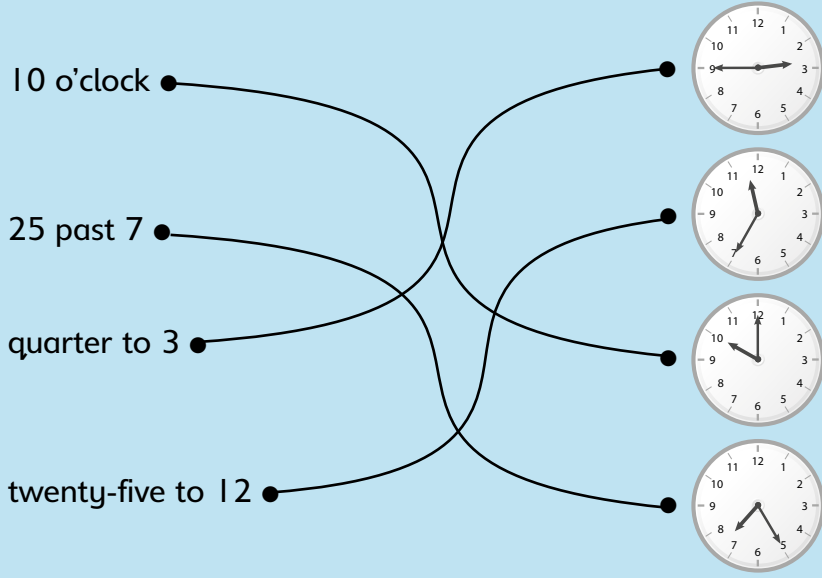
Mark scheme Test A: Paper I

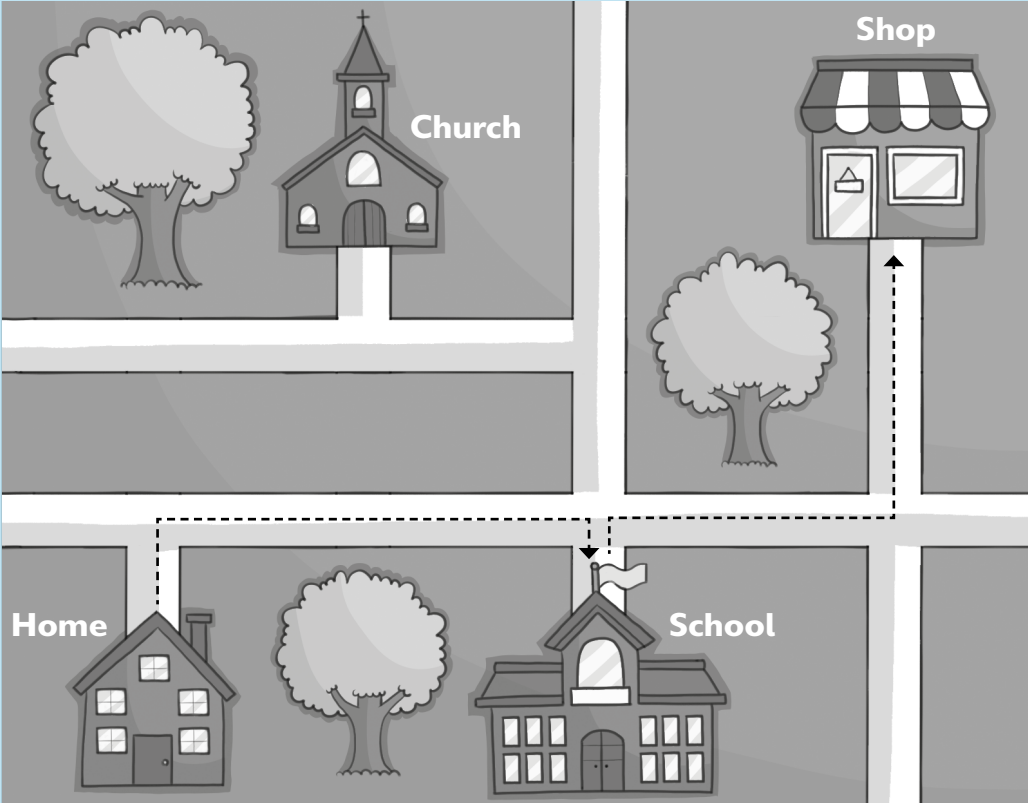
Q	Answers	Marks
Practice	9	
1	13	1
2	7	1
3	20	1
4	47	1
5	19	1
6	41	1
7	1	1
8	4	1
9	33	1
10	42	1
11	0	1
12	29	1
13	20	1
14	60	1
15	20	1
16	5	1
17	92	1
18	25	1
19	6	1
20	38	1
21	22	1
22	4	1
23	95	1
24	28	1
25	10	1
Total		25

Mark scheme Test A: Paper 2

Q	Answers	Marks
Practice	9	
1	25	1
2	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 40%;"> <p>triangle ●</p> <p>square ●</p> <p>rectangle ●</p> <p>circle ●</p> </div> <div style="width: 50%; text-align: center;"> </div> </div> <p style="margin-top: 10px;">Award 1 mark only if all answers are correct.</p>	1
3	28°C	1
4	12	1
5	6 Award 1 mark if 6 buttons are circled or marked in some way.	1
6	61 < 63 54 > 45 Award 1 mark only if both answers are correct.	1
7	✓ x Award 1 mark only if both answers are correct.	1
8	Circled digits are: 3, 2, 9 Circled digits are: 4, 3, 6 Award 1 mark only if all answers are correct.	1
9	○	1
10	7p	1

Q	Answers	Marks
11	÷	1
12	Macco	1
13	86p	1
14	a. Check that 57 has been written in the box. b. Check that the position of 52 has been estimated correctly.	1 1
15	30p Award 2 marks for the correct answer of 30p. If the answer is incorrect, award 1 mark for evidence of appropriate working, for example: $15 + 20 = 35$ $35 \times 2 = 70$ $\pounds 1 - 70\text{p} = \text{incorrect answer}$	2
16	a. 1kg, $1\frac{1}{2}\text{kg}$, 2kg b. $2\text{kg} > 1\text{kg}$ $1\text{kg} < 1\frac{1}{2}\text{kg}$	1 1
17	65 Award 2 marks for the correct answer. If the answer is incorrect, award 1 mark for evidence of appropriate working, for example: $63 - 17 = 46$ $46 + 19 = \text{incorrect answer}$	2
18	a. 9, 12, 15, 18 b. 48, 45, 42, 39, 36	1 1


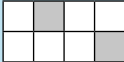

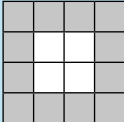




Q	Answers	Marks																				
19	<table border="1"> <thead> <tr> <th data-bbox="277 174 616 264">Shape</th> <th data-bbox="616 174 847 264">Number of edges</th> <th data-bbox="847 174 1082 264">Number of vertices</th> <th data-bbox="1082 174 1316 264">Number of faces</th> </tr> </thead> <tbody> <tr> <td data-bbox="277 264 616 427"></td> <td data-bbox="616 264 847 427">2</td> <td data-bbox="847 264 1082 427">0</td> <td data-bbox="1082 264 1316 427">3</td> </tr> <tr> <td data-bbox="277 427 616 591"></td> <td data-bbox="616 427 847 591">1</td> <td data-bbox="847 427 1082 591">0</td> <td data-bbox="1082 427 1316 591">2</td> </tr> <tr> <td data-bbox="277 591 616 754"></td> <td data-bbox="616 591 847 754">9</td> <td data-bbox="847 591 1082 754">6</td> <td data-bbox="1082 591 1316 754">5</td> </tr> <tr> <td data-bbox="277 754 616 918"></td> <td data-bbox="616 754 847 918">8</td> <td data-bbox="847 754 1082 918">5</td> <td data-bbox="1082 754 1316 918">5</td> </tr> </tbody> </table> <p data-bbox="277 936 959 972">Award 2 marks only if all information is correct.</p> <p data-bbox="277 987 1011 1023">Award 1 mark if half or more of the data is correct.</p>	Shape	Number of edges	Number of vertices	Number of faces		2	0	3		1	0	2		9	6	5		8	5	5	2
Shape	Number of edges	Number of vertices	Number of faces																			
	2	0	3																			
	1	0	2																			
	9	6	5																			
	8	5	5																			
20	94	1																				
21	 <p data-bbox="277 1742 932 1778">Award 1 mark only if all answers are correct.</p> <p data-bbox="277 1794 1299 1830">Do not award the mark if more than one time is matched to one clock.</p>	1																				
22	<p data-bbox="277 1854 1043 1890">a. Check that 12 chocolate squares have been circled.</p> <p data-bbox="277 1912 405 1957">b. $\frac{2}{4} = \frac{1}{2}$</p>	1																				

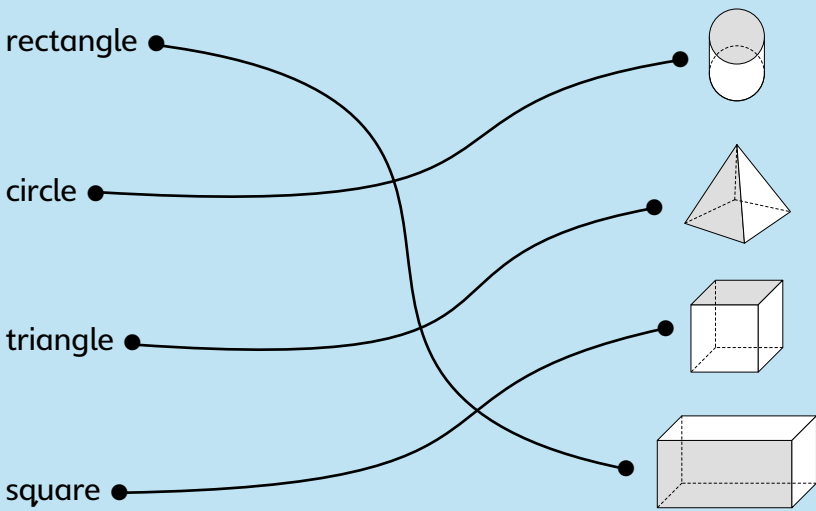
Q	Answers	Marks
23	<p>18</p> <p>Award 2 marks for the correct answer.</p> <p>If the answer is incorrect, award 1 mark for evidence of appropriate working, for example:</p> <p>$20 \div 2 = 10$</p> <p>$16 \div 2 = 8$</p> <p>$10 + 8 = \text{incorrect answer}$</p>	2
24	<p>a. 6</p> <p>b. 3</p>	1 1
25	 <p>a. Award mark if route has been drawn correctly.</p> <p>b. Award mark if route has been drawn correctly.</p>	2
Total		35

Mark scheme Test B: Paper I

Q	Answers	Marks
Practice	2	
1	11	1
2	7	1
3	67	1
4	15	1
5	24	1
6	52	1
7	10	1
8	21	1
9	9	1
10	19	1
11	90	1
12	60	1
13	16	1
14	8	1
15	5	1
16	9	1
17	83	1
18	0	1
19	9	1
20	61	1
21	46	1
22	7	1
23	10	1
24	63	1
25	27	1
Total		25

Mark scheme Test B: Paper 2

Q	Answers	Marks
Practice	45	
1	14	1
2	✓ X X Award 1 mark only if all answers are correct.	1
3	<div style="display: flex; align-items: center; gap: 20px;"> <div style="display: flex; flex-direction: column; gap: 10px;"> $\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$ $\frac{1}{4}$ </div> <div style="display: flex; flex-direction: column; gap: 10px;">     </div> </div> <p>Award 1 mark only if all answers are correct.</p>	1
4	<div style="display: flex; align-items: center; gap: 20px;"> <div style="display: flex; flex-direction: column; gap: 10px;"> 6 o'clock 20 past 9 quarter to 4 five to 6 </div> <div style="display: flex; flex-direction: column; gap: 10px;">     </div> </div> <p>Award 1 mark only if all answers are correct.</p>	1
5	13cm	1
6	$20 + 5 + 30 + 6$	1
7	23	1
8	30	1
9	18 76 18 Award 2 marks if all answers are correct. Award 1 mark if two are correct.	2

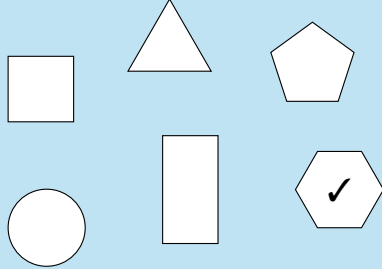

Q	Answers	Marks
10	2	1
11	<p>rectangle ●</p> <p>circle ●</p> <p>triangle ●</p> <p>square ●</p>  <p>Award 1 mark only if all answers are correct.</p>	1
12	<p>20cm, 30cm, 80cm</p> <p>></p> <p>Award 1 mark only if both answers are correct. Answers to the first part need to show cm for each length.</p>	1
13	<p>a. 53, 37</p> <p>b. $84 < 93$</p> <p>$47 > 37$</p> <p>Award 1 mark only if both answers are correct.</p>	1 1
14	<p>x</p> <p>✓</p> <p>x</p> <p>✓</p> <p>Award 2 marks only if all answers are correct.</p> <p>If three answers are correct, award 1 mark.</p>	2
15	<p>a. 3</p> <p>b. 2</p>	1 1
16	<p>32, 42, 52, 62</p> <p>34, 32, 30</p> <p>Award 1 mark only if all answers are correct.</p>	1
17	40p	1
18	<p>14</p> <p>Award 2 marks for the correct answer.</p> <p>If the answer is incorrect, award 1 mark for evidence of appropriate working, for example:</p> <p>$35 \div 5 = 7$</p> <p>$7 \times 2 = \text{incorrect}$</p>	2

Q	Answers	Marks																																																																																																				
19	6 Award 1 mark for the correct answer.	1																																																																																																				
20	Tony	1																																																																																																				
21	8p Award 2 marks for the correct answer. If the answer is incorrect, award 1 mark for evidence of appropriate working, for example: $49 + 26 + 17 = 40 + 20 + 10 + 9 + 6 + 7$ $= 70 + 15 + 7 = 85 + 7 = 92$ $100 - 92 =$ incorrect answer	2																																																																																																				
22	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>15</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>36</td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td>43</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>72</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>81</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>100</td></tr> </table> <p>Award 2 marks for all correct. Award 1 mark for 3 or 4 correct.</p>	1														15																					36							43																													72									81																			100	2
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81																																																																																																						
									100																																																																																													
23	18 Award 2 marks for the correct answer. If the answer is incorrect, award 1 mark for evidence of appropriate working, for example: $25 + 36 = 20 + 30 + 5 + 6$ $= 50 + 11 = 61$ $61 - 43 =$ incorrect answer	2																																																																																																				
24	Check that each shape has a correct line of symmetry drawn in. Award 2 marks only if all shapes are completed correctly. Award 1 mark if 6 or 7 shapes are completed correctly.	2																																																																																																				
25	47 Award 2 marks for the correct answer. If the answer is incorrect, award 1 mark for evidence of appropriate working, for example: $10 \times 5 = 50$ $50 - 3 =$ incorrect answer	2																																																																																																				
Total		35																																																																																																				

Mark scheme Test C: Paper I

Q	Answers	Marks
Practice	5	
1	12	1
2	5	1
3	48	1
4	7	1
5	14	1
6	10	1
7	32	1
8	40	1
9	30	1
10	22	1
11	70	1
12	7	1
13	4	1
14	60	1
15	3	1
16	43	1
17	6	1
18	45	1
19	91	1
20	50	1
21	52	1
22	8	1
23	58	1
24	30	1
25	12	1
Total		25

Mark scheme Test C: Paper 2

Q	Answers	Marks												
Practice	9	1												
1	19	1												
2	5, 12, 19, 20, 23	1												
3	50g	1												
4		1												
5	$\frac{1}{4}$ or $\frac{2}{8}$	1												
6	35	1												
7	B C Only award mark if both are correct.	1												
8	12	1												
9	<table style="border-collapse: collapse; margin: auto;"> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">7</td> <td style="border: none; padding: 0 10px;">—</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">seven</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">13</td> <td style="border: none; padding: 0 10px;">—</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">thirteen</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">28</td> <td style="border: none; padding: 0 10px;">—</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">twenty-eight</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px; text-align: center;">50</td> <td style="border: none; padding: 0 10px;">—</td> <td style="border: 1px solid black; padding: 5px; text-align: center;">fifty</td> </tr> </table>	7	—	seven	13	—	thirteen	28	—	twenty-eight	50	—	fifty	1
7	—	seven												
13	—	thirteen												
28	—	twenty-eight												
50	—	fifty												
10	$20 = 4 \times 5$ $20 \div 5 = 4$ $20 \div 4 = 5$	1												
11		1												
12	The potato should be circled.	1												
13	9 strawberries	1												
14	$3\frac{1}{4}$ (accept $\frac{13}{4}$)	1												

Q	Answers	Marks
15	$\frac{1}{2}$ Two of the four petals should be shaded, and half of the centre circle, in any position. Alternatively, shading cutting two petals exactly in half, with one other fully shaded and half the centre shaded.	1 1
16	$93 - 41 = 52$ <u>or</u> $93 - 52 = 41$	1
17		1
18		1 1
19	5 packs	1
20	35p	1
21	28	1
22	Three-quarter turn should be circled.	1
23	Green and black	1
24	Working must be shown: $60 - 28 = 32$ $32 - 13 = 19$ Final answer = 19 If the answer is incorrect, award one mark for evidence of correct method.	2
25	56p 14p	1 1
26	Working must be shown: $12m \times 6$ Final answer = 72m If the answer is incorrect, award one mark for evidence of correct method.	2

Q	Answers	Marks
27	80 should be circled.	1
28	9 eggs	1
29	25, 43 Award one mark per correct number.	1 1
Total		35

[END]