

**Lancashire Curriculum Tests**

## **Year 2 – End of Summer Term**

**(Meeting end of year expectations)**

# **Mathematics test administration guide and mark schemes**

Paper 1: arithmetic

Paper 2: reasoning

## Administration guide

<b>Format</b>	<ul style="list-style-type: none"><li>• This test consists of two papers, an arithmetic paper and a reasoning paper.</li><li>• It is expected that the arithmetic paper will take approximately 20 minutes and the reasoning paper will take approximately 35 minutes to complete. These timings are simply a guide, not a strict limit.</li><li>• The reasoning paper contains five aural questions, the script for which can be found in this booklet.</li><li>• It is at your discretion to choose when or if pupil(s) require a break during each test or whether, if appropriate, to stop the test early.</li><li>• The test may be administered as a class or in groups, whichever is deemed most suitable. The assistance guidance should be followed in either situation.</li></ul>
<b>Equipment</b>	<p>Each pupil will need the equipment specified below:</p> <ul style="list-style-type: none"><li>• a pencil</li><li>• a ruler showing centimetres</li><li>• a rubber (optional). If rubbers are not provided, you should tell pupils that they may cross out any answers they wish to change.</li></ul> <p>In addition, for these summer term tests, children are permitted to make use of the practical equipment they have available to them in lessons. This includes, but is not limited to:</p> <ul style="list-style-type: none"><li>• base 10 equipment</li><li>• bundles of straws</li><li>• place value counters</li><li>• arrow cards</li><li>• number lines</li><li>• ten frames</li><li>• counters / cubes</li></ul> <p>Pupils are <b>not</b> allowed to use calculators in the test.</p>
<b>Assistance</b>	<ul style="list-style-type: none"><li>• You must ensure that nothing you say or do during a test could be interpreted as giving pupils an advantage, e.g. indicating that an answer is correct or incorrect, or suggesting the pupil looks at an answer again.</li><li>• If a pupil requests it, a question may be read to them on a one-to-one basis. However, adults can only read numbers and not mathematical symbols. This is to ensure that pupils are not given an unfair advantage by having the function inadvertently explained by reading its name.</li></ul>

## Administering the aural questions

<b>Instructions</b>	<ul style="list-style-type: none"> <li>• Explain to the pupils that you will read aloud some questions for them to answer. Explain that you will read each question twice only, leaving a short gap in between. Tell the pupils that they must listen very carefully when you read the questions.</li> <li>• Ask the pupils to turn to the appropriate page of the booklet. Explain that there is a practice question on this page.</li> <li>• When reading the question to the pupils, remember to repeat the question.</li> <li>• Repeat the bold text only.</li> </ul> <p><i>This is a practice question for us to do together.</i></p> <p>(You may help pupils locate the question where necessary.)</p> <p><b>Look at the picture of the place value counters.</b></p> <p><b>What number is represented?</b></p> <p><i>Write your answer in the box.</i></p> <ul style="list-style-type: none"> <li>• Before proceeding, ensure that the pupils know where they should have written their answer and the number they should have written and discuss methods the pupils used to work out their answer. Allow the pupils to change their answers to the correct one by crossing out or rubbing out, to make sure they know how to correct errors.</li> <li>• Explain to the pupils that you will now read out questions 1 to 5.</li> <li>• Tell the pupils that they should try to answer all of the questions. They should write their answer in the correct place for that question.</li> <li>• Remind the pupils that you can't help them answer these next questions. Tell the pupils that they should try to work them out on their own. If they can't answer a question, they should move onto the next one.</li> <li>• Ask the pupils if they have any questions they want to ask you before you start.</li> <li>• Then read questions 1 to 5, allowing time for pupils to write their answers. When reading the question to the pupils, remember to repeat the question. Repeat the bold text only. At the end of each question, allow sufficient time for pupils to complete what they can.</li> </ul>
<b>Question 1</b>	<p><i>Question 1</i></p> <p><b>Write the number seventy two using digits.</b></p> <p><i>Write your answer in the box.</i></p>
<b>Question 2</b>	<p><i>Turn the page in your booklet and find question 2.</i></p> <p><i>Question 2</i></p> <p><b>Sam is facing the window.</b></p> <p><b>He makes a quarter turn anti-clockwise.</b></p> <p><b>What is he facing now?</b></p> <p><i>Write your answer in the box.</i></p>
<b>Question 3</b>	<p><i>Question 3</i></p> <p><b>What temperature does this thermometer show?</b></p> <p><i>Write your answer in the box.</i></p>
<b>Question 4</b>	<p><i>Question 4</i></p> <p><b>Put a ring around the fraction that is the greatest in this set.</b></p>
<b>Question 5</b>	<p><i>Question 5</i></p> <p><b>Which of these amounts would be the capacity of this medicine spoon?</b></p> <p><i>Put a ring around the amount.</i></p>

## General marking principles

The marking guidance within these tests directly reflects the guidance for the national end of key stage tests.

<b>1. The pupil's answer does not match closely any of the examples given in the mark scheme.</b>	Teachers will use their judgement in deciding whether the answer corresponds with details in the 'Requirement' column of the mark scheme. Reference will also be made to the 'Additional guidance' column.
<b>2. The pupil has answered in a non-standard way.</b>	Pupils may provide evidence in any form as long as its meaning can be understood. Diagrams, symbols or words are acceptable for indicating an answer.
<b>3. There appears to be a misread of the numbers affecting the working.</b>	<p>A misread occurs when a pupil misreads a number given in the question and consistently uses a different number that does not alter the original intention or difficulty of the question. For example, if '43' is misread as '48', both numbers may be regarded as comparable in difficulty. However, if '43' is misread as '40' or '45', the misread number may be regarded as making the question easier. The misread of a number will affect the award of marks.</p> <p>No marks are awarded if there is more than one misread in a question or if the mathematics is simplified by the misread.</p> <p>For <b>1-mark</b> questions: no mark is awarded for one or more misreads.</p> <p>For <b>2-mark</b> questions that have a method mark: 1 mark is awarded if the correct method is correctly implemented with the misread number, provided this does not simplify the mathematics.</p>
<b>4. No answer is given in the expected place, but the correct answer is given elsewhere.</b>	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.
<b>5. The pupil's answer is correct but the wrong working is shown.</b>	Always award the mark for a final response that is correct.
<b>6. The answer in the answer box is wrong, but the correct answer is shown in the working.</b>	Give precedence to the response given in the answer box over any other workings. However, in a 2-mark question, one mark may still be awarded for evidence of a complete, correct method.
<b>7. The pupil's answer correctly follows through from earlier incorrect work.</b>	'Follow through' marks for an answer may only be awarded when specifically stated in the mark scheme.
<b>8. The correct answer has been crossed (or rubbed) out and not replaced.</b>	No marks will be awarded for crossed-out answers or working.
<b>9. More than one answer is given.</b>	If all answers given are correct (or a range of answers are given, all of which are correct), a mark will be awarded unless the mark scheme states otherwise. If both correct and incorrect responses are given, no mark will be awarded unless the mark scheme states otherwise.
<b>10. The pupil reverses a digit in their answer.</b>	<p>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.</p> <p>As a further example, where the answer is '61' and the response '01' is given, then this should be awarded the mark.</p> <p>You should take a decision based upon your knowledge of the child's writing.</p>

**11. The pupil transposes digits in their answer.**

A pupil transposes digits by reversing their order e.g. '83' instead of '38'.



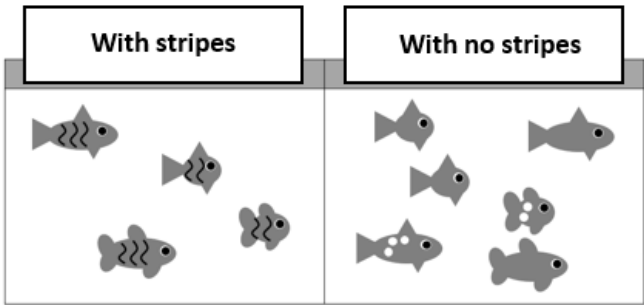
An answer with transposed digits should not be awarded the mark; for example, a response of '16' or '01' when the answer is '61' should not be marked as correct.

## Mark schemes for Paper 1: arithmetic

Qu.	Requirement	Mark	Additional guidance
P	10		
1	47	1m	
2	28	1m	
3	7	1m	
4	80	1m	
5	14	1m	
6	6	1m	
7	34	1m	
8	12	1m	
9	40	1m	
10	68	1m	
11	30	1m	
12	22	1m	
13	15	1m	
14	70	1m	
15	23	1m	
16	1	1m	
17	2	1m	
18	18	1m	
19	50	1m	
20	6	1m	
21	30	1m	
22	4	1m	
23	9	1m	
24	83	1m	
25	7	1m	

**Total of 25 marks**

# Mark schemes for Paper 2: reasoning

Qu.	Requirement	Mark	Additional guidance
P	32		
1	72	1m	
2	sofa	1m	Accept <b>sofa</b> circled or ticked with no other items indicated.
3	19°C	1m	
4	$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{3}$ $\frac{3}{4}$	1m	Accept any other unambiguous indication of the correct answer, e.g. $\frac{3}{4}$ ticked.
5	 50ml      100ml      1 litre	1m	Accept any other unambiguous indication of the correct answer, e.g. 5ml ticked.
6a	9	1m	
6b	3cm	1m	
7	33 pages	1m	
8		1m	Accept any other clear indication of the correct shape, such as circling.
9	4 boxes	1m	
10		1m	Accept other ways of describing stripes and no stripes, e.g. wiggly lines and no wiggly lines.
11a	12 quarters	1m	
11b	3 oranges	1m	
12	<p>Award <b>ONE</b> mark for an explanation that recognises the answer to <math>30 + 40</math> is related to <math>3 + 4 = 7</math></p> <p>For example,</p> <p><i>'30 + 40 is 3 tens plus 4 tens. If <math>3 + 4 = 7</math> then 3 tens plus 4 tens must be 7 tens which is 70.'</i></p> <p>or</p> <p><i>'Both of the numbers have been made ten times greater, so the answer will be ten times greater, which is 70.'</i></p>	1m	Do <b>not</b> award the mark for just writing the answer 70.

13	<table><thead><tr><th>odd</th><th>even</th></tr></thead><tbody><tr><td>87</td><td>14</td></tr><tr><td>49</td><td>76</td></tr><tr><td>35</td><td><del>41</del></td></tr><tr><td>93</td><td>22</td></tr><tr><td></td><td>90</td></tr></tbody></table>	odd	even	87	14	49	76	35	<del>41</del>	93	22		90	1m	<p><b>Both</b> numbers must be crossed for the award of <b>ONE</b> mark.</p> <p>Accept other unambiguous indications of the correct answers, e.g. both 58 and 41 circled or ticked.</p>
odd	even														
87	14														
49	76														
35	<del>41</del>														
93	22														
	90														
14	9 stickers	1m													
15a	30 books	1m													
15b	<div><div><div><div></div><div></div></div><div>Class 1</div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>Class 2</div></div><div><div><div></div><div></div><div></div><div></div></div><div>Class 3</div></div><div><div><div></div><div></div><div></div></div><div>Class 4</div></div></div> <p>OR</p> <div><div><div><div></div><div></div></div><div>Class 1</div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>Class 2</div></div><div><div><div></div><div></div><div></div><div></div></div><div>Class 3</div></div><div><div><div></div><div></div><div></div></div><div>Class 4</div></div></div>	1m	<p>Accept the half square representing 5 books as long as the height is clearly less than the height of a full square.</p>												
16	18 balls	1m													
17	83 bricks	1m													
18	<p>Award <b>TWO</b> marks for all four correctly matched</p> <div><div>5 x 4</div><div>4 x 2</div><div>2 x 4</div><div>3 x 3</div><div><div><div><div></div><div></div><div></div><div></div></div><div></div></div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div></div></div><div><div><div><div></div><div></div><div></div></div><div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div></div></div></div></div><p>Award <b>ONE</b> mark for any three correctly matched.</p></div></div></div>	up to 2m													
19	Award <b>ONE</b> mark for the answers <b>drink</b> and <b>dice</b> in any order.	1m													



20		1m	
21	15 minutes	1m	
22	<p>Award <b>ONE</b> mark for both numbers correctly identified.</p> <p>32    42    39    49    45</p>	1m	
23	£43	1m	
24	23	1m	
25	5kg	1m	
26a	farm	1m	
26b	34	1m	
27	30 mins	1m	
28	68cm	1m	
29	<p>Award <b>TWO</b> marks for all three answers correctly identified.</p> <p>Ben    74p</p> <p>Sam    40p</p> <p>Lin    34p</p> <p>Award <b>ONE</b> mark for any two correct answers.</p>	up to 2m	

**Total of 35 marks**