#### Year 4 - Reasoning and Problem Solving - Autumn



#### **General Marking Principles**

- Allow answers given in words unless otherwise instructed. Ignore spelling errors providing intention is clear.
- For numbers with four or more digits, accept answers with or without a comma or other separator.

Question	Answer	Marks	Notes and guidance
1	260	1	
2	$3 \times 4 = 4 + 4 + 4$ $J$ $3 \times 4 = 4 \times 3$ $J$ $3 \times 4 = 2 \times 6$ $J$ $3 \times 4 = 12 \times 2$	1	Award 1 mark for all 3 statements correctly ticked.  Accept any other clear way of indicating the correct answers.  Do not award the mark if additional statements are indicated, unless it is clear that the correct statements are the pupil's final choice.
3	Charlotte	1	Accept any other clear way of indicating the correct answer.
4	B C A	1	Accept any other clear way of indicating the correct answer. e.g. writing the numbers on the number line.
	6,000	1	
5	One thousand, three hundred	1	<b>Do not</b> accept 1,300 Must be written in words.
	Two different ways of partitioning 1,300 e.g. 1,000 and 300 500 and 800	2	Award 2 marks for both part whole models correctly completed.  Award 1 mark for one part whole model correctly completed.
6	e.g. 2,970 + 100 = 3,070	1	Award 1 mark for any example where adding 100 would change the hundreds and thousands digit.

# Year 4 – Reasoning and Problem Solving – Autumn



7	75, 100, 125	1	Award 1 mark for all three numbers correct.
8	422 - 990 = 568  422 + 568 = 990  422 = 568 - 990  422 = 990 - 568	1	Award 1 mark for both statements correctly ticked.  Accept any other clear way of indicating the correct answers.  Do not award the mark if additional statements are indicated, unless it is clear that the correct statements are the pupil's final choice.
	442	1	
9	£9.00	2	Award 2 marks for the correct answer of £9.00  Show your method 90-10-9 £9  Accept £9 or £9.00  If the answer is incorrect, award 1 mark for a full method with no more than one arithmetical error, e.g.
10	$7 \times 3 = 21 \text{ or } 3 \times 7 = 21$ $6 \times 9 = 54 \text{ or } 9 \times 6 = 54$	2	Award 2 marks for both statements correctly completed.  Award 1 mark for 1 statement correctly completed.
	6 60 6	3	Award 1 mark for each number sentence correctly completed.

# Year 4 – Reasoning and Problem Solving – Autumn



11	14 cm	1	
	Any rectangle with perimeter of 12 cm e.g. 3 cm by 3 cm 2 cm by 4 cm 1 cm by 5 cm	1	
12	1 and 1	1	Award 1 mark for both numbers correctly completed  Do not accept 0
13	< < =	3	Award 1 mark for each statement correctly completed.
14	<b>-</b> 1	1	
15	e.g. Courtney could have added 4,000 and 6,000 and then subtracted 2	1	Award 1 mark for any explanation of a more efficient method.
16	7	3	Award 3 marks for the correct answer of 7 e.g.    12

### Year 4 – Reasoning and Problem Solving – Autumn



	Award 1 mark for evidence of an appropriate method. e.g.

Total: 30 marks