#### Year 5 - Reasoning and Problem Solving - Spring



#### General Marking Principles

- Allow answers given in words unless otherwise instructed. Ignore spelling errors provided 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
Q1	3.42	1	
	3.62	1	
Q2	274	1	
Q3	Raj has not added the two tens he has exchanged.	1	Do not award a mark if children have only corrected Raj's mistake; they need to provide a written explanation that refers to the tens.
Q4	74	1	
	222	1	
Q5	$\frac{1}{3}$ $\frac{1}{4}$	1	All 3 must be matched correctly to be awarded the mark.
Q6	$ \begin{array}{c c} \hline \frac{1}{2} & \overline{3} \\ \hline 10 & \overline{10} \end{array} $	2	Award 1 mark for each correctly placed fraction.

# Year 5 – Reasoning and Problem Solving – Spring



Q7	45	2	Award 2 marks for the correct answer. Possible methods: $ 72 \div 8 = 9 $ $ 9 \times 3 = 27 $ Award 1 mark for fully correct method with no more than one numerical error. $ 72 \div 8 = 8 $ $ 8 \times 5 = 40 $
Q8	Indicates $\frac{7}{8}$	1	Accept any clear indication – circle, underlined etc.
Q9	£2.50	2	Award 2 marks for the correct answer.  7.00  1.50  4.4  4.5  Award 1 mark for fully correct method with no more than one numerical error.
Q10	8	1	
	5	1	Accept any value in the range 4.9 to 5.1
Q11		2	Award 2 marks for all 4 conversions correct.  Award 1 mark for 2 or 3 conversions correct.

# Year 5 – Reasoning and Problem Solving – Spring



Q12	6.002, 6.02, 6.2, 6.22	1	
Q13	£4.50	2	Award 2 marks for the correct answer. Do not accept 4.5 Possible methods:  Award 2 marks for the correct answer. Do not accept 4.5 Possible methods:  Award 1 mark for fully correct method with no more than one numerical error.  Also award 1 mark for £4.5 obtained from a fully correct method.
Q14	5 + 16 OR 17 + 4	1	Do <b>not</b> accept e.g. 16 + 5, 4 + 17
Q15	32	1	
Q16	e.g.	1	Accept any other example where one of the quarters has been split in half e.g. using a horizontal line or a diagonal line, or one eighth of each part shaded
Q17	Any of 5,649 5,694 5,946 5,964 6,459 6,495	1	
	6,954	1	

### Year 5 - Reasoning and Problem Solving - Spring



	1		1
Q18	35%	2	Award 2 marks for the correct answer. Possible methods:
			$\frac{1}{4} = 25\%$ $\frac{1}{4} + \frac{2}{5} = \frac{12}{20}$ $\frac{2}{5} = 40\%$ $\frac{5}{20} + \frac{3}{20} = \frac{13}{20}$ $1 - \frac{13}{20} = \frac{7}{20}$ $\frac{7}{20} = \frac{35}{100} = 35\%$
			Award 1 mark for fully correct method with no more than one numerical error.
			$\frac{1}{4} = 25\%$ $\frac{2}{5} = 20\%$ $25 + 20 = 45$ $100 - 45 = 55$
	210		Award 2 marks for the correct answer. Possible method:
Q19		2	Award 1 mark for fully correct method with no more than one numerical error. $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Total: 30 marks