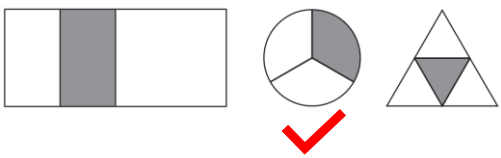
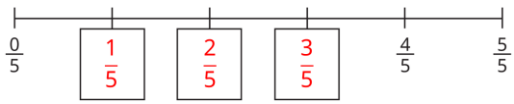
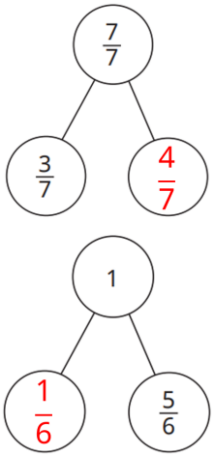
Spring mark scheme

Year 3 – Reasoning & problem solving

General marking principles

- Answers should be single values in their simplest form unless the mark scheme says otherwise
- Accept reversed digits provided intention is clear e.g. a reversed 2 must clearly show the characteristics of a 2 rather than a 5
- Do not award the mark if more than one answer is given

Question	Answer	Marks	Notes and guidance
1	9	1	
	13 cm 5 mm	1	Accept 13 cm 4 mm to 13 cm 6 mm inclusive.
2		1	Accept any clear indication. Do not award the mark if more than one answer has been indicated.
3	$8 \times 4 = 32$ $4 \times 8 = 32$ $32 \div 4 = 8$ $32 \div 8 = 4$	2	Award 1 mark for three correct calculations.
4		1	Accept any equivalent fraction.
5	7	1	
6		1 1	Accept any equivalent fraction.

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Question	Answer	Marks	Notes and guidance
7	400	1	
	1 l 600 ml	1	
8	Any integer greater than 3	1	
	Any integer less than 10	1	
9	243	2	Award 1 mark for attempt to add 145 and 98 with no more than one arithmetic error.
10	387	1	
	163	1	
	698	1	
11	4	1	
	6	1	
12	$64 \times 3 = 192$ OR $3 \times 64 = 192$	1	Do not award mark if no answer for the calculation has been given.
13	Indicates 400, 80 and 270 and gives a valid reason e.g. • The ones digit is 0 • $400 = 10 \times 40$ $80 = 10 \times 8$ $270 = 10 \times 27$	1	Award the mark for any clear indication and all three numbers are needed. Do not award the mark if no reason, or incomplete reason, is given.
14	80 mm, 78 cm, 1 m, 180 cm shortest … longest	1	Award the mark for all measurements converted to the same unit e.g. 100 cm and 8 cm seen.

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Question	Answer	Marks	Notes and guidance
15	Indicates 100 grams	1	Do not award mark if more than one answer has been indicated.
16	16	1	
17	Accept any equivalent fraction e.g. $\frac{2}{4}$, $\frac{3}{6}$, $\frac{5}{10}$, $\frac{30}{60}$ etc.	1	Fraction must be stated and not just shown on the diagram.
18	500 415	2	Award 1 mark for either correct answer OR correct subtraction of 85 from their value for jug A.
19	1 m 20 cm	1	Award the mark for correctly converted measurements e.g. 0 m 120 cm
20	36	1	

Total : 30 marks