Year 5 Reasoning Test Set 3 Paper B

| Q | Marks | Answer | Notes |
| :---: | :---: | :---: | :---: |
| 1a | 1 | 202 |  |
| 1b | 1 | 904 |  |
| 2 | 1 | 0.509 |  |
| 3a | 1 | 2 rectangles of the same size divided into a different number of divisions, one of which is a multiple of the other. |  |
| 3b | 1 | Accept equivalent fractions that match what was illustrated in 3a. Award 1 mark if 3a is drawn incorrectly but the fractions given for 3b are equivalent. |  |
| 4 | 1 | $\begin{array}{rrrr} 6 & 0 & 1 & 9 \\ - & 6 & 2 & 8 \\ \hline 2 & 3 & 9 & 1 \\ \hline \end{array}$ | 1 mark for both correct. |
| 5 | 1 | 5045718 and 8745829 | 1 mark for both correct. |
| 6a | 1 | 30 hours |  |
| 6b | 1 | Monday or Wednesday | Both days must be given. |
| 7 | 1 |  |  |
| 8a | 1 | rounded to the nearest 10 rounded to the nearest 100 rounded to the nearest | All 3 correct for 1 mark. |
| 8b | 1 | £2.75 |  |
| 9 | 1 | $\begin{aligned} & 561 \times 1=561 \\ & 561 \div 1=561 \\ & 561 \times 0=0 \end{aligned}$ | All 3 correct for 1 mark. |
| 10 | 2 | $\begin{array}{r} 529 \\ \times \quad \begin{array}{r} 6 \\ \times \quad 1 \quad 7 \quad 4 \end{array} \\ \hline 31 \end{array}$ | 1 mark for each digit correct. |
| 11 | 1 |  | 1 mark for both correct. |


| 12 | 2 | Jenna has more left. | 2 marks for correct answer. <br> 1 mark for incorrect answer but evidence of correct method with one error in calculating. |
| :---: | :---: | :---: | :---: |
| 13 | 2 | 2 bottles | 2 marks for correct answer. <br> 1 mark for correctly showing the capacity of the bottle as 150 ml . |
| 14 | 2 | 135g flour | 2 marks for correct answer. <br> 1 mark for showing that the scaling is 2:3. |
| 15a | 1 | $12^{\circ} \mathrm{C}$ |  |
| 15b | 1 | October and November |  |
| 16 | 2 | Regular shapes have equal sides and angles. <br> Irregular shapes do not have equal sides and angles (but could have sides or angles equal). <br> A shape cannot have equal sides and angles and not have equal sides and angles. | 2 marks for correctly stating that regular shapes have equal sides and angles and irregular shapes do not have equal sides and angles. <br> 1 mark for stating either that regular shapes have equal sides and angles or that irregular shapes do not have equal sides and angles. <br> No marks for only writing about sides or angles. <br> The third statement "A shape cannot have equal sides and angles and not have equal sides and angles" is not required for 2 marks. |
| 17 | 2 | 3.793 | 2 marks for correct answer. <br> 1 mark for a correct method with only 1 mistake in calculation. |
| 18a | 1 | 51 | Allow 50-52 inclusive. |
| 18b | 1 | There are 26 books with more than 150 pages out of 120 pages altogether. 26 is less than one quarter of 120 (which is 30 ). | Award marks for a correct explanation and reasoning with different totals caused by the reading of the graph. |
| 19 | 2 | $51^{\circ}$ | 2 marks for correct answer. <br> 1 marks for correct method with 1 mistake in calculation. |
| 20 | 1 | $(9,7)$ |  |
| 21 | 2 | Jenna has $25 \%$ or $1 / 4$ left over and Asif has $20 \%$ or 1/5 left over. | 2 marks for explanation that uses equivalences that puts both parts eaten or left over in the correct same format. <br> 1 mark for a reasonable explanation without using equivalences to put both parts eaten or left over in the correct same format. |
| Total | 35 |  |  |

