## Autumn mark scheme <br> Year 4 - 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
- For numbers with four or more digits, accept answers with a comma positioned incorrectly or without a comma. Do not accept a decimal point or an apostrophe.

| Question | Answer |  |  |  |  | Marks | Notes and guidance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 523 |  |  |  |  | 1 |  |
|  | Five hundred and twentythree |  |  |  |  | 1 | Ignore spelling errors if intention is clear. |
| 2 | 700 | 800 |  | 1,000 | 1,100 | 1 | Both numbers needed. |
| 3 | Draws any shape with area less than 6 squares. |  |  |  |  | 1 | Allow half squares. |
| 4 |  |  |  |  |  | 1 | Accept any clear indication and allow slight inaccuracy if intention to show 850 is clear. |
| 5 |  |  |  |  |  | 1 <br> 1 |  |



| Question | Answer | Marks | Notes and guidance |
| :---: | :---: | :---: | :---: |
| 6 | $475+125$ <br> 475-125 <br> $125+475$ <br> 475-350 | 1 | Accept any clear indication. Must indicate both subtractions. |
| 7 | £23 | 2 | Award 1 mark for complete correct method with no more than one arithmetic error. |
| 8 | Indicates "No" AND gives reason e.g. <br> - It should be 5,000 <br> - It's going up in one thousands <br> - The end of the line would be 1,000 | 1 | Do not award mark if no reason given. |
| 9 | Indicates CX | 1 | Accept any clear indication. Do not award mark if more than one answer indicated. |
| 10 | $10 \times 3=6 \times 5$ | 1 |  |
|  | $500-50=400+50$ | 1 |  |
|  | $8 \times 2 \times 3=3 \times 4 \times 4$ | 1 |  |
| 11 | $\begin{aligned} & < \\ & > \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |  |
| 12 | £12 | 2 | Award 1 mark for complete correct method with no more than one arithmetic error. |



| Question | Answer | Marks | Notes and guidance |
| :---: | :---: | :---: | :---: |
| 13 | e.g. "600-300 = 300" | 1 | 600 and 300 must be seen. Do not accept incomplete answers such as "It should be smaller" |
| 14 | 3,990 | 2 | Award 1 mark for complete correct method with no more than one arithmetical error. |
| 15 | $\begin{aligned} & 1,010 \\ & 1,000 \\ & 1,000 \end{aligned}$ | 2 | Award 1 mark for two correct answers. |
|  | 40 | 1 |  |
| 16 | 8 | 2 | Award 1 mark for complete correct method with no more than one arithmetic error. |
| 17 | e.g. "She could subtract 2,000 and then add 1" | 1 | Accept any correct explanation. |
| 18 | 70 | 2 | Award 1 mark for complete correct method with no more than one arithmetic error. |

Total : 30 marks

