| Question | Answer |
| :---: | :---: |
| 1 | a) 3 <br> b) 3 <br> The answers are the same. <br> c) $18 \div 6=18 \div 3 \div 2$ |
| 2 | $\begin{aligned} & 24 \div 8=24 \div 2 \div 4 \\ & 24 \div 2 \div 4=3 \\ & \text { So } 24 \div 8=3 \end{aligned}$ |
| 3 | a) $16 \div 2 \div 4$ or $16 \div 4 \div 2$ <br> b) $27 \div 3 \div 3$ <br> c) $32 \div 2 \div 2$ <br> d) $40 \div 2 \div 2 \div 2$ <br> Children's factors should be the same, although they may have written the factors the opposite way round in part a). |
| 4 | Huan $\begin{array}{r} 176 \div 2=88 \\ 88 \div 4=22 \\ \text { So } 176 \div 8=22 \end{array}$ $\square$ $176 \div 4=44$ $44 \div$ $2$ $\text { So } 176 \div 8=22$ <br> Esther and Huan used the factors in a different order, but their answers are the same. |
| 5 | a) 171 <br> b) 66 <br> c) 62 <br> d) 95 |
| 6 | a) Method 1 <br> Method 3 <br> Method 2 <br> Method 4 <br> Factor pair of 6: 2 and 3 $672 \div 2=336$ $336$ $] \div 3=[$ $\square$ 112 <br> Children need to justify why they prefer one method to the others. <br> b) $\begin{array}{ll}107 & 1,142 \\ 52 & 2,214\end{array}$ |

## Y5 - Spring - Block 1 - Step 10 - Efficient division Answers (continued)

| Question | Answer |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | Divisible by 2 |  | Divisible by 3 |  | Divisible by 5 |  | Divisible by 6 |  |
|  | 364 366 666 | 990 2,412 5,310 | 363 366 666 | 990 999 2,412 5,310 | 365 | 990 5,310 | 366 | 990 2,412 5,310 |
|  | Most of the numbers go in more than one column. 990 and 5,310 go in all of the columns. <br> All the numbers that are divisible by 6 are also divisible by both 2 and 3 |  |  |  |  |  |  |  |
| 8 | a) 300 <br> b) 40 <br> c) 30 <br> d) 404 |  |  |  |  |  |  |  |
| 9 | $\text { a) } \begin{array}{r} 4,896 \div 1 \\ 4,896 \div 2 \\ 4,896 \div 3 \\ 4,896 \div 4 \\ 4,896 \div 6 \\ 4,896 \div 8 \\ 4,896 \div 9 \end{array}$ <br> b) There are seven solutions with no remainder and two solutions with a remainder, so there are fewer solutions that have a remainder. |  |  |  |  |  |  |  |

