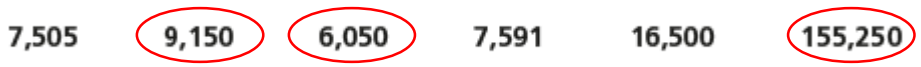
Y5 – Autumn – Block 1 – Step 8 – Counting in 10s, 100s, 1,000s, 10,000s and 100,000s Answers

<table>
<tr><th>Question</th><th>Answer</th></tr>
<tr><td>1</td><td>a) 27 and 57 (the sequence is increasing by 10)
b) 119, 129 and 159 (the sequence is increasing by 10)
c) 575, 775, 975 and 1075 (the sequence is increasing by 100)
d) 7,300, 10,300, 11,300, 12,300 and 13,300 (the sequence is increasing by 1,000)
e) 6,290, 6,260, 6,250 and 6,240 (the sequence is decreasing by 10)</td></tr>
<tr><td>2</td><td>a) 4, 14, 24, 34, 44, 54
b) 4, 104, 204, 304, 404, 504
c) 4, 1,004, 2,004, 3,004, 4,004, 5,004

Many possible answers e.g. they all have the same starting term 4; every term in all of the sequences will end with 4; the second term in each sequence has a 1 in it, but the value of the 1 is different in each sequence; each sequence increases by different amounts etc.</td></tr>
<tr><td>3</td><td> 
Since the sequence is increasing by 100 from term to term, the tens and ones digits will always remain the same (50) Any values in the other columns are possible.

Any numbers that have 5 in the tens column and 0 in the ones column are possible.</td></tr>
<tr><td>4</td><td>a) 234,650
b) The green counter moves right
c) The purple counter moves left
d) The counter will move down to the next row e.g. 9 + 1 = 10, 90 + 10 = 100 etc.</td></tr>
<tr><td>5</td><td>
<table>
<tr><th>Number</th><th>10 more</th><th>100 more</th><th>1,000 more</th><th>10,000 more</th><th>100,000 more</th></tr>
<tr><td>25</td><td>35</td><td>125</td><td>1,025</td><td>10,025</td><td>100,025</td></tr>
<tr><td>250</td><td>260</td><td>350</td><td>1,250</td><td>10,250</td><td>100,250</td></tr>
<tr><td>2,500</td><td>2,510</td><td>2,600</td><td>3,500</td><td>12,500</td><td>102,500</td></tr>
<tr><td>25,000</td><td>25,010</td><td>25,100</td><td>26,000</td><td>35,000</td><td>125,000</td></tr>
<tr><td>250,000</td><td>250,010</td><td>250,100</td><td>251,000</td><td>260,000</td><td>350,000</td></tr>
</table>

Many possible answers e.g. for 25, the tens and ones column always remain as 25 except in 35; they may notice the sum of the digits inputted are 7, but the sum of the digits in all of the answers are 8 etc.</td></tr>
</table>

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Question	Answer
6	If he adds both counters to the same column, he could make: 413,850, 233,850, 215,850, 213,870 and 213,852 Many more possible solutions if he adds the counters to different columns e.g. 323,850, 213,951 etc. He can't add both counters to the hundreds column because then he would have to exchange the 10 hundreds for 1 thousand.