

Y5 – Autumn – Block 3 – Step 7 – Cube numbers Answers

Question	Answer											
1	a) child's $2 \times 2 \times 2$ cube made of multilink b) No There will be one cube sticking out.											
2	a) 27 b) $3 \times 3 \times 3$ c) It is a cube number because it can make a cube with integer sides.											
3	a) <table border="1" style="margin-left: 20px;"> <tr> <td>2^3</td> <td>$2 \times 2 \times 2$</td> <td>8</td> </tr> <tr> <td>3^3</td> <td>$3 \times 3 \times 3$</td> <td>27</td> </tr> <tr> <td>4^3</td> <td>$4 \times 4 \times 4$</td> <td>64</td> </tr> </table> b) $5^3 = 5 \times 5 \times 5 = 125$	2^3	$2 \times 2 \times 2$	8	3^3	$3 \times 3 \times 3$	27	4^3	$4 \times 4 \times 4$	64		
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4	a) $5^3 = 125$ 5 cubed = 125 $5 \times 5 \times 5 = 125$ b) $10^3 = 1,000$ 10 cubed = 1,000 $10 \times 10 \times 10 = 1,000$											
5	a) <table style="display: inline-table; margin-right: 20px;"> <tr> <td style="border: 1px solid black; padding: 2px;">6×3</td> <td style="border: 1px solid black; padding: 2px;">$6 + 6 + 6$</td> <td style="border: 1px solid black; padding: 2px;">$6 \times 6 \times 6$ ✓</td> </tr> </table> b) Yes Kim has correctly calculated 6×6 , then multiplied her answer by 6 c) <table style="margin-left: 20px;"> <tr> <td style="border: 1px solid black; padding: 2px;">4^3</td> <td style="border: 1px solid black; padding: 2px;">4×2</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">5^3</td> <td style="border: 1px solid black; padding: 2px;">9×3</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">2^3</td> <td style="border: 1px solid black; padding: 2px;">16×4</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">3^3</td> <td style="border: 1px solid black; padding: 2px;">25×5</td> </tr> </table>	6×3	$6 + 6 + 6$	$6 \times 6 \times 6$ ✓	4^3	4×2	5^3	9×3	2^3	16×4	3^3	25×5
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3^3	25×5											
6	343											
7	Kim has worked out 3×3 instead of 3 to the power 3 Kim might have made this mistake because $1 \times 1 = 1$ but so is $1 \times 1 \times 1$											
8	27 years											