

Index Notation

ANSWERS 

1 $2 \times 2 \times 2$ How many 2s? 3 Index form 2 3 Value 8	2 3×3 How many 3s? 2 Index form 3 2 Value 9	3 $4 \times 4 \times 4$ How many 4s? 3 Index form 4 3 Value 64	4 5×5 How many 5s? 2 Index form 5 2 Value 25
5 $2 \times 2 \times 2 \times 2$ How many 2s? 4 Index form 2 4 Value 16	6 $10 \times 10 \times 10$ How many 10s? 3 Index form 10 3 Value 1000	7 Write $5 \times 5 \times 5$ in index form and work out its value. <u>three 5s</u> Answer <u>$5^3 = 125$</u>	8 Which is bigger, 2^3 or 3^2? Show how you know. <u>8 and 9</u> Answer <u>3^2</u>

Index Notation *further practice*

ANSWERS 

9 Write $3 \times 3 \times 3 \times 3$ in index form and work out its value. Index form <u>3^4</u> Value <u>81</u>	10 Write 6^3 as a multiplication and work out its value. Multiplication <u>$6 \times 6 \times 6$</u> Value <u>216</u>	11 Write $<$, $>$ or $=$ in each box. 2^4 = 4^2 3^3 > 5^2 10^2 > 2^6 <u>16 and 16, 27 and 25, 100 and 64</u>	12 A square patio has 9 rows of slabs, with 9 slabs in each row. Write the number of slabs in index form and work out how many there are. Index form <u>9^2</u> Slabs <u>81</u>
13 Find the missing power. $3^{\square} = 81$ <u>$3 \times 3 \times 3 \times 3 = 81$</u> Answer <u>4</u>	14 Ava folds a sheet of paper in half 5 times. How many layers thick is the folded paper? Write your answer in index form and as a number. Index form <u>2^5</u> Layers <u>32</u>	15 Kai has 2^3 stickers. Lily has 3^2 stickers. How many stickers do they have altogether? <u>$8 + 9$</u> Answer <u>17</u>	16 Zara says 2^5 and 5^2 are the same because they use the same numbers. Is Zara right? Explain. <u>$2 \times 2 \times 2 \times 2 \times 2 = 32, 5 \times 5 = 25$</u> Answer <u>No, 32 and 25</u>