

# Learnzy Academy

## Worksheet: Cube and Cube Roots

1. Without finding the cube, find the unit digit of  $93^3 + 47^3$ .
2. The cube root of a number is 12. What will be the cube root of its  $\frac{1}{27}$ th part?
3. A metal cube of side 5 cm is melted to form small cubes each of side 1 cm. How many small cubes are formed?
4. Find the smallest number by which 648 must be multiplied to make it a perfect cube.
5. Find the cube root of 17576 by the prime factorisation method.
6. A cube-shaped ice block of side 10 cm is cut into 1000 smaller cubes of equal size. Find the side of each small cube.
7. Find the cube root of the product of 64 and 125.
8. Find the cube root of  $125 \times 64$
9. A cube has a surface area of  $150 \text{ cm}^2$ . Find its side length (approximate).
10. The side of a cube is doubled. How many times will its volume increase?
11. A metal cube of side 6 cm is melted and recast into smaller cubes of side 2 cm. How many small cubes are formed?
12. The cube root of a number is 9. Find the number.
13. Find the cube root of  $64 \times 125 \times 8 \times 27$
14. A cube's volume increases from  $27 \text{ cm}^3$  to  $64 \text{ cm}^3$ . Find the percentage increase in its edge.
15. A cube has a volume of  $512 \text{ m}^3$ . Find its surface area.
16. Find the smallest number by which 392 must be divided to get a perfect cube.
17. If  $a^3 = 729$ , find the value of  $a^2$ .
18. If the cube of a number ends in 1, what will be the unit digit of the number?
19. The volume of a cube is  $1331 \text{ cm}^3$ . Find the length of its edge.
20. Find the cube of 0.3