INDIAN SCHOOL AL WADI AL KABIR
Class VIII, Mathematics
WORKSHEET (2026-27)
CUBE AND CUBE ROOT

Multiple Choice Questions								
Q.1	The smallest number by which 2560 must be multiplied to get a perfect cube is							
	A	2	**B**	5	**C**	6	**D**	25
Q.2	The units place digit in the cube of 857 is							
	A	7	**B**	9	**C**	3	**D**	4
Q.3	$\frac{\sqrt[3]{125}\times\sqrt[3]{64}}{\sqrt[3]{125}-\sqrt[3]{64}}$ equals (CBQ)							
	A	20	**B**	30	**C**	40	**D**	50
Q.4	When the square of a number is subtracted from the cube of the same number, the result is 100. The number is							
	A	2	**B**	5	**C**	4	**D**	1
Q.5	The value of x if $\sqrt[3]{\frac{x}{729}}=\frac{5}{3}$ is (CBQ)							
	A	125	**B**	25	**C**	5	**D**	35
	DESCRIPTIVE TYPE QUESTIONS:							
Q.6	Express 11^3 as the sum of consecutive odd numbers.							
Q.7	find the volume of a cube whose side is 3.2 cm.							
Q.8	Find the cube root of 10648 by prime factorization method.							
Q.9	Three natural numbers are in the ratio 2:3:4. If the sum of their cubes is 2673, find the numbers. (HOTS)							

Q.10	**Case Study:** Fitness bands are smart devices are widely used to track daily activities like walking and running. Riya checked her fitness band at night and found that she had walked 17,280 steps during day.  Based on the data answer the following questions: (a) Check whether the given number of steps is a perfect cube (show proper working). (b) Find the smallest number that should be multiplied to make it a perfect cube. (c) Find the cube root of the new number obtained. (d) If $8x^3 = 216$, then find the value of x.

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ANSWER KEY							
1	D	2	C	3	A	4	B
5	A	7	$32.768cm^3$	8	22	9	6,9,12
10	a) No	10	b)100	10	c)120	10	d)3