DAV PUBLIC SCHOOL, UNIT-8, BHUBANESWAR. ODISHA.
ZONE-1
SUBJECT –MATHEMATICS, CLASS-VIII
CHAPTER- (CUBE AND CUBE ROOTS)
WORKSHEET: (BASIC)

	SECTION-A (1 MARK)	
1	Find the cube roots of the integer: -474552	1
2	Find the value of following cube roots: $\sqrt[3]{27 \times 2744}$	1
3.	Find the cube root of $\frac{0.008}{0.125}$	1
	SECTION-B(2MARKS)	
4.	By which smallest number must 5400 be multiplied to make it a perfect cube?	2
5.	Find the smallest number by which 16384 be divided so that the quotient may be a perfect cube.	2
6.	Is 4096 a perfect cube? If yes, then what is the number whose cube root is 4096?	2
7.	Find the smallest number by which 375 must be multiplied to obtain a perfect cube.	2
	SECTION-C(3MARKS)	
8.	Evaluate: $\sqrt[3]{\frac{0.027}{0.008}} \div \sqrt{\frac{0.09}{0.04}} - 1$	3
9.	Find the volume of a cube whose surface area is 150 m^2	3
10.	Evaluate the cube root of $\frac{686}{1024}$	
	SECTION-D(4MARKS)	
11.	Is 53240 a perfect cube? If not, then by which smallest natural number should 53240 be divided so that the quotient is a perfect cube?	4
12.	Is 68600 a perfect cube? if not, find the smallest number by which 68600 must be multiplied to get a perfect cube	4

DAV PUBLIC SCHOOL, UNIT-8, BHUBANESWAR. ODISHA. ZONE-1 SUBJECT –MATHEMATICS, CLASS-VIII CHAPTER- (CUBE AND CUBE ROOTS) WORKSHEET-(STANDARD)-1		
SECTION-A(1MARKS)		
1	Find the cube root of -2744000	1
2	Show that $\sqrt[3]{216 \times 343} = \sqrt[3]{216} \times \sqrt[3]{343}$	1
SECTION-B(2MARKS)		
3	Given that $\sqrt[3]{99}$ =4.626, find the value of $\sqrt[3]{792}$.	2
4	Given that $\sqrt[3]{31}$=3.141. Find the value of $\sqrt[3]{\frac{248}{216}}$.	2
SECTION-C(3MARKS)		
5	What is the smallest number by which 4608 may be multiplied so that the product is perfect cube?	3
6	What is the smallest number by which 2304 may be divided so that the equation is a perfect cube?	3
7.	Find the surface area of a cube whose volume is $343m^3$	
8.	Find the cube root of $3375 \times (-729)$	
SECTION-D(4MARKS)		
9.	Find the smallest number which when multiplied with 137592 will make the product a perfect cube. Further, find the cube root of the product.	4
10.	The volume of a cubical box is 13.824 cubic meters. Find the length of each side of the box.	4
11.	Multiply 26244 by the smallest number so that the product is a perfect cube. What is that number? Also find the cube root of the product.	4
12.	Divide 88209 by the smallest number so that the quotient is a perfect cube. What is that number? Also find the cube root of the quotient.	4

DAV PUBLIC SCHOOL,UNIT-VIII

SUBJECT- MATHS TOPIC-CUBE AND CUBE ROOTS

WORKSHEET
(STANDARD)-2

Choose the correct options
(1x2=2)

1. Which is the smallest three-digit perfect cube?
(a) 125 (b) 343 (c) 729 (d) 512

2. Which is the greatest three-digit perfect cube?
(a) 125 (b) 343 (c) 729 (d) 512

Fill in the blanks **(1x2=2)**

3. The cube of an even number is always_____.

4. The smallest natural number by which 243 must be multiplied to make the product a perfect cube is_____.

Answer the following
(1x2=2)

5. How many digits will be there in the cube root of 46656?

6. What is the volume of a cube whose edge is 2cm?

Short Answer type Questions (I)
(2x2=4)

7.Evaluate: $\sqrt[3]{64 \times 729}$

8. What is the cube root of 0.001728?

Short Answer type Questions (II)
(2x3=6)

9. Is 1188 a perfect cube? If not, by which smallest natural number should 1188 be divided so that the quotient is a perfect cube?
10. A cubical box has a volume of 512000 cubic cm. What is the length of the side of box?

Long answer Type **(1x4=4)**

11. Three cubes of sides 3cm, 4cm and 5 cm respectively are melted to form a new cube. What is the side of new cube?

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ZONE-1

SUBJECT –MATHEMATICS, CLASS-VIII

CHAPTER- (CUBE AND CUBE ROOTS)

WORKSHEET-(ADVANCE)

TIME-45MINS MAX.MARKS-20

	SECTION-A(2X1=2)	
1	Find the cube root of the following number. 140x2450	1
2	Evaluate $\sqrt[3]{1000} + \sqrt[3]{0.008} + \sqrt[3]{0.125}$	1
	SECTION-B(2x2=4)	
3	Find the side of a cube whose surface area is 150 sq m .	2
4	What is the smallest number by which 243000 must be divided so that the quotient is perfect cube?	2
	SECTION-C(2x3=6)	
5	How many sq meters of cardboard will be needed to make a cube of volume 216 m^3 .	3
6	Three numbers are to one another as 2:3:4. The sum of their cubes is 33957. Find the numbers.	3
	SECTION-D(2x4=8)	
7	A cuboid of dimensions 126m, 140m, 525m has been melted to form a cube. Find the side of the cube.	4
8	Prove that if a number is doubled then its cube is eight times the given number.	4

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WORKSHEET-(HOTS)

1.	What happens to the cube of a number if the number is multiplied by i) 3? ii) 4? iii) 5?	
2.	Find the volume of a cube, one face which has an area of 64 m^2 .	
3.	Find the volume of a cube whose surface area is 384 m^2.	
4.	Evaluate the following : 5^2	
5.	Prove that if a number is trebled then its cube is 27 times the cube of the given number.	
6.	The volume of a cube is 9261000m^3 . Find the side of the cube.	
7.	The volume of a cubical box is 474.552 cubic meters. Find the length of each side of the box.	
8.	Three numbers are to one another 2:3:4. The sum of their cubes is 0. 334125. Find the numbers.	