

## INDIAN SCHOOL DARSAIT DEPARTMENT OF MATHEMATICS



Subject: Mathematics Topic: Exponents And Date of Worksheet: \_\_\_\_\_\_

Power (3)

Resource Person: Mrs Bhavya Vijelesh Date : \_\_\_\_\_\_

Name of the Student : \_\_\_\_\_ Class & Division :VII\_\_\_ Roll Number : \_

S.No.	Section A(Basic Skills)			Marks
1	Find the prime factoriz	ation of 980		1
2	Find the HCF of 70,105	,175		1
3	Find the LCM of 20,25	and 30		1
		Section	В	
4	Write the base and the			
	(a) 6 <sup>-3</sup>	(b) $(3^2)^3$		
	(c) 3 <sup>0</sup>	(d) $3^2 \times 6^2$		
5	Express the following numbers as a product of primes:			2
	(a) 288	(b) 135	(c) 729 × 64	
6	Which is greater?			2
	(a) 4 <sup>3</sup> or 3 <sup>4</sup>	(b) 9 <sup>2</sup> or 2 <sup>9</sup>		
7	Simplify			2
	(a) $(-2)^3 \times 5^3 \times (-3)^4$			
	125 × 3 <sup>4</sup>			
	(b) $(5^6 \times p^7) \div (25 \times p^3)$			
	(c) $[(3^3)^2 \times 3^4] \div 3^8$			
	(d) 4 <sup>0</sup>			
	5°× 6°			
	(e) $(\frac{-1}{3})^2 \times (\frac{3}{-2})^3 \times (\frac{2}{5})^3$			
	(f) 25 × 5 <sup>2</sup> ×t <sup>8</sup>			
	10 <sup>3</sup> × t <sup>4</sup>			
8	Express the following r	numbers in the standar	d form.	2

	(a) 3478.5	(b) 46.789				
	(c) 6,04,05,002	(d) 51,24,000				
9	Write the following number	2				
	(a) 86450	(b) 2009				
	(c) 1302040					
10	Find the number from the expansion given below.					
	(a) $5 \times 10^5 + 7 \times 10^3 + 6 \times 10^2$					
	(b) $4 \times 10^4 + 1 \times 10^2 + 3 \times 10^0 + 4 \times 10^{-1}$					
	(c) $7 \times 10^6 + 8 \times 10^5 + 3 \times 10^6$	$^{2} + 9 \times 10^{0} + 1 \times 10^{-2} + 2 \times 10^{-3}$				
	Section C (Hot Questions)					
11	Find the value of n if $\left[\left(\frac{-4}{7}\right)^3\right]$	$\begin{bmatrix} 3 \end{bmatrix}^5 = \left(\frac{-4}{7}\right)^{4n-5}$	3			
13	Evaluate $\frac{\left(\frac{-2}{3}\right)^4 \times \left(\frac{4}{7}\right)^5}{\left(\frac{4}{7}\right)^3 \times \left(\frac{4}{9}\right)}$		3			
	$\left(\frac{4}{7}\right)^3 \times \left(\frac{4}{9}\right)$					