



# INDIAN SCHOOL DARSAIT

## DEPARTMENT OF MATHEMATICS



Subject : Mathematics	Topic : Exponents And Power	Date of Worksheet : _____
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 factorization of 980	1
2	Find the HCF of 70,105,175	1
3	Find the LCM of 20,25 and 30	1
	<b>Section B</b>	
4	Write the base and the exponent in the following (a) $6^{-3}$ (b) $(3^2)^3$ (c) $3^0$ (d) $3^2 \times 6^2$	
5	Express the following numbers as a product of primes: (a) 288 (b) 135 (c) $729 \times 64$	2
6	Which is greater? (a) $4^3$ or $3^4$ (b) $9^2$ or $2^9$	2
7	Simplify (a) $\frac{(-2)^3 \times 5^3 \times (-3)^4}{125 \times 3^4}$ (b) $(5^6 \times p^7) \div (25 \times p^3)$ (c) $[(3^3)^2 \times 3^4] \div 3^8$ (d) $\frac{4^0}{5^0 \times 6^0}$ (e) $\left(\frac{-1}{3}\right)^2 \times \left(\frac{3}{-2}\right)^3 \times \left(\frac{2}{5}\right)^3$ (f) $\frac{25 \times 5^2 \times t^8}{10^3 \times t^4}$	2
8	Express the following numbers in the standard form.	2

	(a) 3478.5 (c) 6,04,05,002	(b) 46.789 (d) 51,24,000	
9	Write the following numbers in expanded form. (a) 86450 (c) 1302040	(b) 2009	2
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) $7 \times 10^6 + 8 \times 10^5 + 3 \times 10^2 + 9 \times 10^0 + 1 \times 10^{-2} + 2 \times 10^{-3}$		2
<b>Section C (Hot Questions)</b>			
11	Find the value of n if $\left[\left(\frac{-4}{7}\right)^3\right]^5 = \left(\frac{-4}{7}\right)^{4n-5}$		3
13	Evaluate $\frac{\left(\frac{-2}{3}\right)^4 \times \left(\frac{4}{7}\right)^5}{\left(\frac{4}{7}\right)^3 \times \left(\frac{4}{7}\right)}$		3