

**SPTPMGUPS**  
**KURAVANKONAM, THIRUVANANTHAPURAM**  
**STD: 7 MATHS**  
**4. REPEATED MULTIPLICATION**  
**WORKSHEET-1**



**GALILEO GALILEI**  
**Mathematics is the language**  
**With which God has written**  
**The universe**

**MULTIPLY AGAIN AND AGAIN**

**Complete the table**

2	2	2
4	$2 \times 2$	$2 \times 2$
8	$4 \times 2$	$2 \times 2 \times 2$
16	$8 \times 2$	$2 \times 2 \times 2 \times 2$
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**Complete the table**

3	3	3
9	$3 \times 3$	$3 \times 3$
27	$9 \times 3$	$3 \times 3 \times 3$
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	Number of times to use 3 in a multiplication	Write in short
3	1	$3^1$
$3*3$	2	$3^2$
$3*3*3$	3	$3^3$
$3*3*3*3$	4	$3^4$
$3*3*3*3*3*3*3*3*3*3$ $3*3*3*3*3$	10	$3^{10}$

Here  $3*3*3*3=3^4$ , it is read as 3 raised to 4

In  $3^4$ , 3 is called the **base** and 4 is called **exponent or power of 3**

**Second power** of a number is its **square** ( $3^2$ =square of 3) and **third power** of a number is its **cube** ( $2^3$ =cube of 2)

## EXPONENTIATION

The four arithmetic operations are addition, subtraction, multiplication and division.

Exponentiation is the fifth operation.

Repeated addition is called multiplication and repeated multiplication is called exponentiation

Complete the table

$2^2$	$2*2$	4
$5^3$	$5*5*5$	-----
-----	$3*3*3*3$	-----
-----	$9*9*9*9*9$	-----
$3^5$	-----	-----