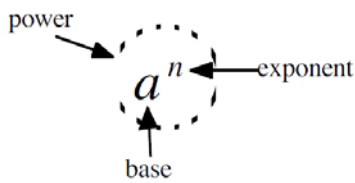


## Chapter 3 – Powers and Exponents

### LESSON 1: USING EXPONENTS TO DESCRIBE NUMBERS

Exponential form: a short way to represent repeated multiplication using powers.



A power consists of a base and an exponent.

The exponent tells us how many times we multiply the base.

Ex.1: State the base and the exponent

a)  $4^3$

b)  $(-2)^5$

c)  $-5^1$

Ex.2: Write in exponential form

a)  $3 \times 3 \times 3 \times 3 \times 3 \times 3$

b)  $(-2)(-2)(-2)(-2)(-2)$

Ex.3: Evaluate

a)  $3^4$

b)  $4^2$

c)  $-4^2$

d)  $(-4)^2$

e)  $3^3$

f)  $(-5)^3$

Ex.4: Express the following powers in words

a)  $3^2$

b)  $4^3$

c)  $5^4$

Ex.5: Write each number as a power of 2

a) 16

b) 64

c) 256