

Name: Key  
5<sup>th</sup> Grade Notes 2.4 Multiplication Patterns p. 99

-powers of ten are numbers that have a one only and end in zeros

Ex: 10; 100; 1,000; 10,000

-to mult. by a power of 10, add the number of zeros to that number

Ex:  $10 \times 7 = 70$  one zero each side

Ex:  $100 \times 21 = 2,100$

You can use exponents to multiply powers of 10 as well:

Ex:  $13 \times 10^2 = 13 \times 100 = 1,300$  2 zeros

(make sure the number of zeros equals the exponent)

Ex:  $22 \times 10^4 = 22 \times 10,000 = 220,000$

You can also multiply any numbers with zeros at the end. Just use the

basic fact and then add the same number of zeros.

Ex:  $40 \times 7,000$  ( $4 \times 7 = 28$ ) so it equals 280,000