Introduction to Exponents: Understanding the Key Terms

When you multiply the same number over and over, you can write the problem using an exponent. Take a closer look at the terms we use when talking about exponents.

$$2^3 = 2 \times 2 \times 2 = 8$$

Base: the factor that is repeatedly multiplied

Exponent: tells how many times the base is used as a factor

Expanded form: uses the base and exponent to write out the repeated multiplication

Value: the result of your calculation, or your answer

Let's practice! Use what you learned to fill in the blanks.

4^2

Base number: ___4___   Exponent: ___2___

Expanded form: ___4 x 4___

Value: ___16___

5^3

Base number: ___5___   Exponent: ___3___

Expanded form: ___5 x 5 x 5___

Value: ___125___

10^4

Base number: ___10___   Exponent: ___4___

Expanded form: ___10 x 10 x 10 x 10___

Value: ___10,000___

2^5

Base number: ___2___   Exponent: ___5___

Expanded form: ___2 x 2 x 2 x 2 x 2___

Value: ___32___

6^3

Base number: ___6___   Exponent: ___3___

Expanded form: ___6 x 6 x 6___

Value: ___216___

3^4

Base number: ___3___   Exponent: ___4___

Expanded form: ___3 x 3 x 3 x 3___

Value: ___81___