Exponents = Multiplication Shortcut!!!

Exponential form

3^3

Exponent

Base

Value

$3 \times 3 \times 3 = 27$

Standard form

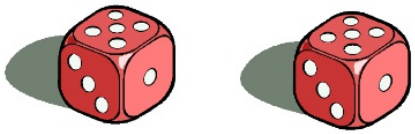
Vocabulary:

Exponent: The number of times a number or expression is used as a factor of repeated multiplication.

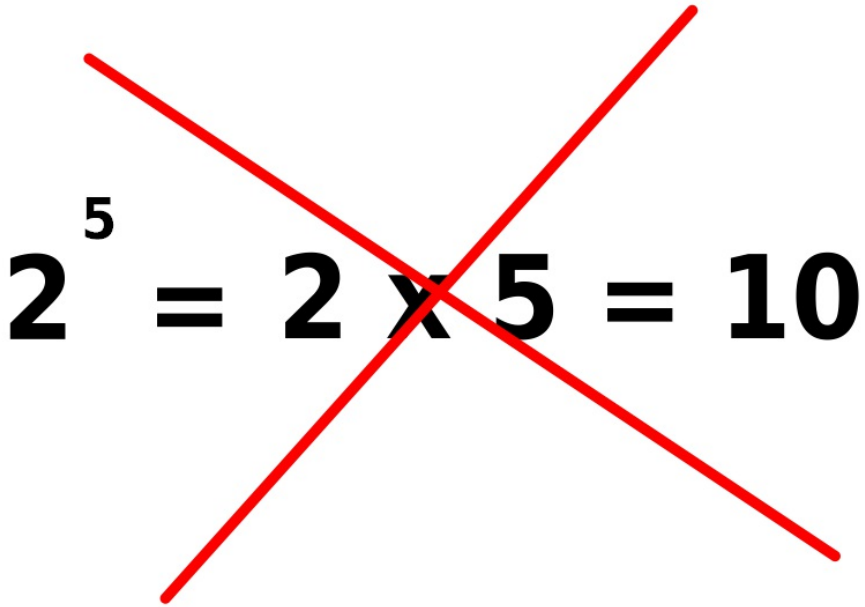
Base: When a number is raised to a power & used as a factor in the repeated multiplication

Factor: A number being multiplied

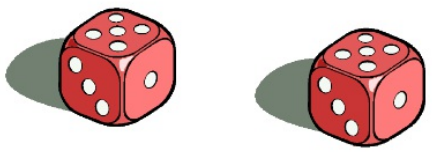
Variable: A letter or symbol used to represent a number or quantities that vary



COMMON MISTAKES:



Base	Exponent	Exponential Form	Standard Form	Value



When writing an expression in exponential form, how do you know which number to use as the base and which number to use as the exponent?

Can a number be represented by using the same base and exponent?

What are four ways we can represent the products in this activity?

How are standard form and exponential form related?

What is the purpose of an exponent?

Can we write equivalent exponent expressions?