

## The Mole

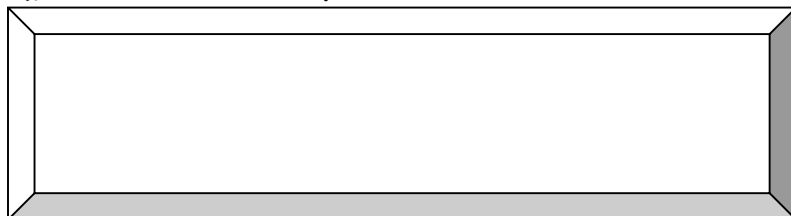
### A. What is a mole?

1. The mole is a \_\_\_\_\_ that allows chemists to calculate the number of particles (atoms, molecules, or formula units) in a given amount.
2. It is counting number similar to the word \_\_\_\_\_
3. 1 mole of any substance contains \_\_\_\_\_ particles of that substance Also called \_\_\_\_\_ number)



Particles	Made of	Example
Atoms		
Molecules		
Formula Units		

### B. Using the mole as a conversion factor



- Use sig figs
- Cancel units
- List knowns and unknowns

### C. Examples:

1. Determine the number of iron atoms in 2.50 moles of iron.
  
  
  
  
  
  
  
  
  
  
2. How many moles are contained in  $1.85 \times 10^{26}$  molecules of  $\text{CO}_2$ ?

How to enter scientific notation into a scientific calculator