

Name: _____

Avogadro and the Mole Lab

Because atoms and molecules are too small to count, we “count” them by weighing. We count them in groups called moles. A mole is Avogadro’s number (_____) representative particles of something. The name for the representative particle is determined by the type of substance.

Representative particles of elements are _____.

Representative particles of molecular compounds are _____.

Representative particles of ionic compounds are _____.

Procedure

1. Record the mass of an empty bag.
2. For each sample, fill in the data in the table below. (Do NOT open the bag.)

Results

Mass of Empty Bag: _____

Bag #	Chemical Formula	Chemical Name of Substance	Mass of Bag and Substance
1			
2			
3			
4			
5			
6			

Calculations

Bag #	Mass of Substance in Bag (g)	Molar Mass of Substance (g/mole)	Moles of Substance	Term for the Representative Particle	Number of Representative Particles	Number of Oxygen Atoms
1						
2						
3						
4						
5						
6						