

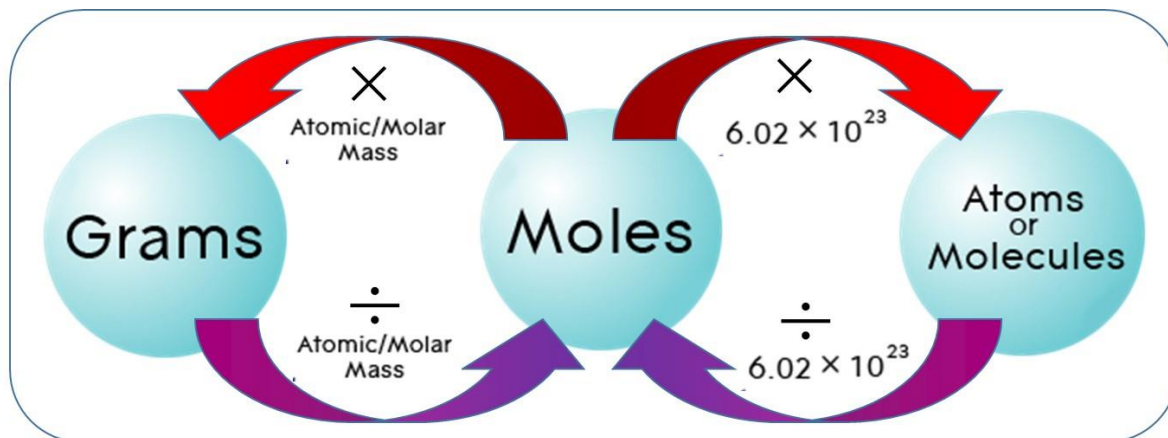


# NUEVO COLEGIO DEL PRADO

Science 9th Grade

Guía de Trabajo Semana 10, 8-12 Junio 2020

Email: mrsciencencp@gmail.com



This week during classes we will review the conversions using:

1. MOLAR MASS
2. AVOGADRO'S NUMBER



1. **Attend and participate** in class, please bring calculator, periodic table, and notebook and be ready to WORK!
2. A kahoot **quiz** of conversions will be done on FRIDAY so review before classes.



# CONVERSIONS THAT INVOLVE MOLES WORKSHOP

Send this before Friday to my Email: [mrsclencncp@gmail.com](mailto:mrsclencncp@gmail.com) (send the evidences of your work)

1. A scientist started measuring some samples of chemicals she found in his laboratory.



Using a electronic scale she measured the amount of grams. These were the results:



**IMPORTANT:** Don't use these chemicals when cooking. :p

Complete the table. (1,7)

Compound	Chemical Formula	Molar Mass (g/mol)	Sample Mass (grams)	Moles present in the sample (mol)
Sulfuric Acid	H <sub>2</sub> SO <sub>4</sub>		23	
Nitric Acid	HNO <sub>3</sub>		158	
Sulfur trioxide	SO <sub>3</sub>		268	
Iron oxide	Fe <sub>2</sub> O <sub>3</sub>		322	
Ammonia	NH <sub>3</sub>		71	
Sodium hypochlorite	NaClO		52	
Potassium Hydroxide	KOH		0.56	

2. We found two substances in two different recipients. Each recipient had a label that showed: "1 mol". (1,0)

The first one contains Calcium Oxide (CaO) and the second Cupric Sulfate CuSO<sub>4</sub>.

- Which one of the two recipients contains more grams? Explain (Convert to grams)
- Which one contains more particles? Explain (Convert to particles using Avogadro's number)

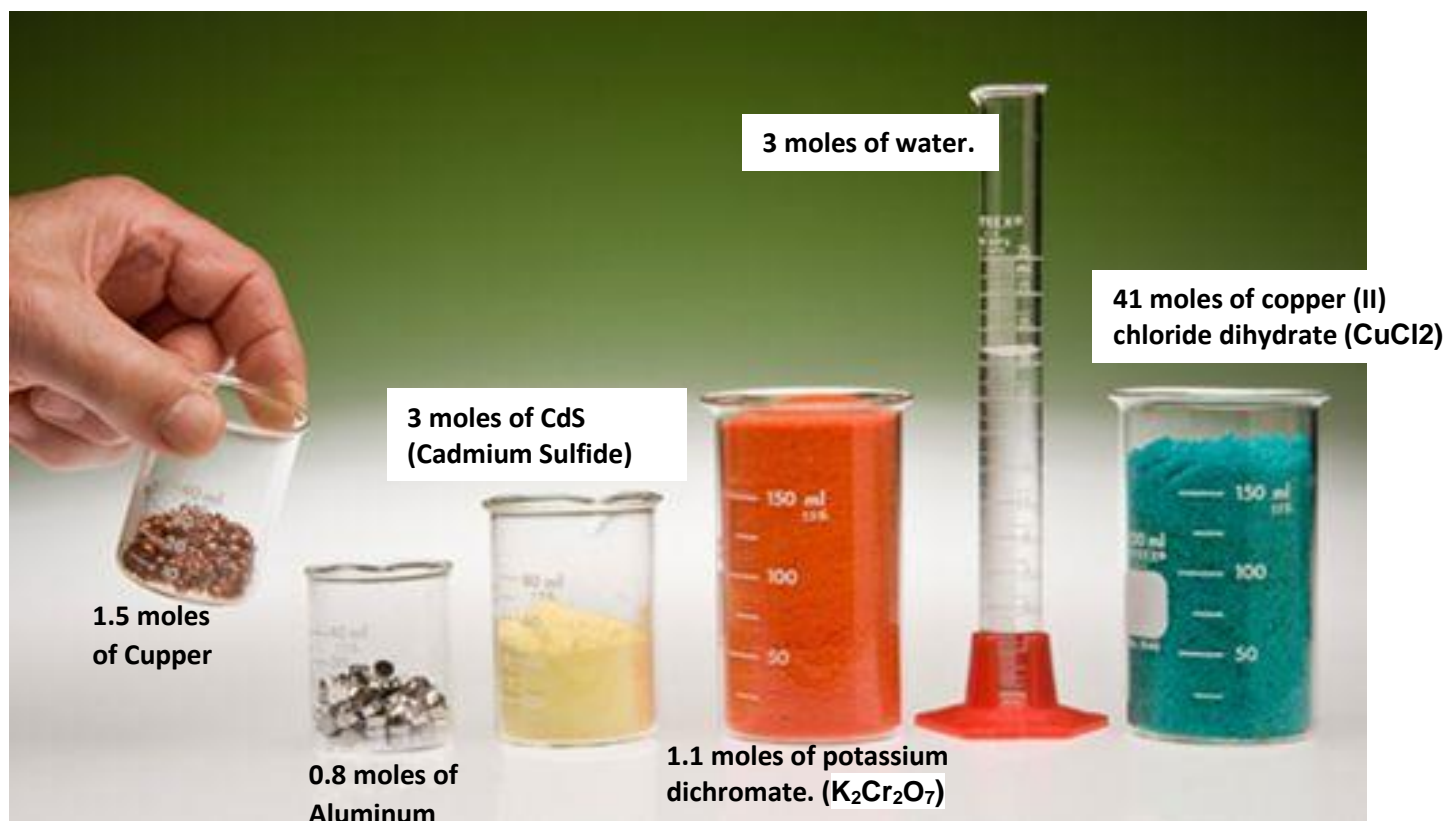
Rec. 1



Rec. 2



### 3. Convert from moles to grams. (1,7)



### 4. Convert to # of particles. (atoms or molecules, depends of the substance) (0.6)

- A. How many molecules is 1.50 moles of  $CO_2$ ?
- B. How many molecules is 2.03 moles of  $Al_2(SO_4)_3$ ?
- C. How many atoms are 4.52 moles of carbon?
- D. How many molecules are 2.50 moles of  $H_2O$ ?



Este trabajo es nota para el 40%: enviar desarrollado antes del viernes ya sea en la libreta o en hojas pero debe estar hecho a MANO. Colocar en asunto:

**CONVERSIONS WORKSHOP NAME LAST NAME**

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