



**High School Science Virtual Learning**

**Chemistry**  
**Mole Conversions**

**April 8, 2020**



# High School Chemistry

## Lesson: April 8, 2020

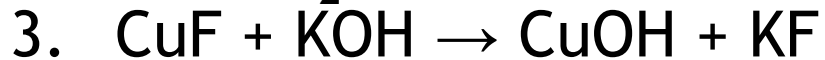
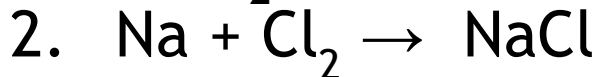
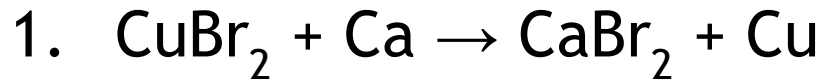
### **Objective/Learning Target:**

**Students will be able to convert between grams, moles, and particles.**



## Let's Get Started:

Classify each of the following reactions:



## Let's Get Started: **Answer Key**

Classify each of the following reactions:

1.  $\text{CuBr}_2 + \text{Ca} \rightarrow \text{CaBr}_2 + \text{Cu}$  **Answer: Single Displacement**
2.  $\text{Na} + \text{Cl}_2 \rightarrow \text{NaCl}$  **Answer: Combination**
3.  $\text{CuF} + \text{KOH} \rightarrow \text{CuOH} + \text{KF}$  **Answer: Double Displacement**



# Lesson Activity:

## Directions:

1. Watch this [video](#) and answer the following questions.
  - a. Where can you find the molar mass?
  - b. Molar mass is used to convert between what units?
2. Watch this [video](#) and answer the following questions.
  - a. What is Avogadro's number?
  - b. Between what units is it able to convert?



# Practice

Complete the following questions using the information you learned during the lesson activity.

Remember: In conversions,  $6.022 \times 10^{23}$  goes with particles, molar mass goes with grams, and 1 USUALLY goes with moles

## Questions:

1.  $3.5 \times 10^{24}$  atoms of iron is equivalent to how many moles of iron?
2. What is the mass in grams of 0.327 moles of neon?
3. How many moles are in a 85.6-g sample of carbon monoxide?
4. How many formula units are in 2.357 moles of  $\text{FeCl}_3$ ?



Once you have completed the practice questions check with the **answer** key.

1. 5.8 mol Fe
2. 6.60 g Ne
3. 3.06 mol CO
4.  $1.419 \times 10^{24}$  formula units  $\text{FeCl}_3$



## More Practice:

Follow the links below to do more practice.

1. [Mole to Mass Conversions](#)
2. [Mole to Gram Conversions](#)



Additional Practice:

Click on this [link](#) for additional practice.

This [link](#) has the answer key.