## **Mole Conversions**

## **Converting Between Moles and Grams**

#### **Example One:**

How many grams is 5.0 moles of iron (Fe)?

### Example Two:

How many grams is 2.0 moles of water?

## Example Three:

How many moles is 30.03 grams of  $HC_2H_3O_2$ ?

# **Converting Between Moles and Particles**

## Example Four:

How many atoms are in 3.0 moles of Iron?

### Example Five:

How many moles are in  $9.0 \times 10^{24}$  molecules of  $NO_2$ ?

# **Converting Between Grams and Particles**

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How many grams is  $4.0 \times 10^{23}$  atoms of copper?

### Question Seven:

How many molecules is 88 grams of CO<sub>2</sub>?

Question Eight:
How many grams is $3.01 \times 10^{23}$ molecules of dinitrogen pentoxide, $N_2O_5$ ?
Question Nine:
How many formula units is 8.6 grams of zinc chloride, ZnCl <sub>2</sub> ?

## Question Ten:

How many grams is 8.56 x  $10^{24}$  molecules of sucrose  $C_{12}H_{22}O_{11}$  ?