

## Moles, Mass and Particles Worksheet

- 1) How many formula units are there in 24 g of  $\text{FeF}_3$ ?
- 2) How many formula units are there in 450 g of  $\text{Na}_2\text{SO}_4$ ?
- 3) How many grams are there in  $2.3 \times 10^{24}$  atoms of silver?
- 4) How many grams are there in  $7.4 \times 10^{23}$  formula units of  $\text{AgNO}_3$ ?
- 5) How many grams are there in  $7.5 \times 10^{23}$  molecules of  $\text{H}_2\text{SO}_4$ ?
- 6) How many formula units are there in 122 g of  $\text{Cu}(\text{NO}_3)_2$ ?
- 7) How many grams are there in  $9.4 \times 10^{25}$  molecules of  $\text{H}_2$ ?
- 8) How many formula units are there in 230 g of  $\text{CoCl}_2$ ?

- 9) How many formula units are there in 2.3 g of  $\text{NH}_4\text{SO}_2$ ?
- 10) How many grams are there in  $3.3 \times 10^{23}$  molecules of  $\text{N}_2\text{I}_6$ ?
- 11) How many molecules are there in 200 g of  $\text{CCl}_4$ ?
- 12) How many grams are there in  $1 \times 10^{24}$  molecules of  $\text{BCl}_3$ ?
- 13) How many grams are there in  $4.5 \times 10^{22}$  formula units of  $\text{Ba}(\text{NO}_2)_2$ ?
- 14) How many formula units are there in 9.34 g of  $\text{LiCl}$ ?
- 15) How many grams do  $4.3 \times 10^{21}$  molecules of  $\text{UF}_6$  weigh?
- 16) How many formula units are there in 230 g of  $\text{NH}_4\text{OH}$ ?

## Moles, Mass and Particles Worksheet – Answer Key

- 1)  **$1.3 \times 10^{23}$  formula units**
- 2)  **$1.91 \times 10^{24}$  formula units**
- 3)  **$4.1 \times 10^2$  g**
- 4)  **$2.1 \times 10^2$  g**
- 5)  **$1.2 \times 10^2$  g**
- 6)  **$3.92 \times 10^{23}$  formula units**
- 7)  **$3.1 \times 10^2$  g**
- 8)  **$1.07 \times 10^{24}$  formula units**
- 9)  **$1.7 \times 10^{22}$  formula units**
- 10)  **$4.3 \times 10^2$  g**
- 11)  **$7.82 \times 10^{23}$  molecules**
- 12) **200 g**
- 13) **17.1 g**
- 14)  **$1.33 \times 10^{23}$  formula units**
- 15) **2.5 g**
- 16)  **$3.96 \times 10^{24}$  formula units**