

## **Grams/Moles Calculations**

*Given the following, find the number of moles:*

1) 30 grams of H<sub>3</sub>PO<sub>4</sub>

2) 25 grams of HF

3) 110 grams of NaHCO<sub>3</sub>

4) 1.1 grams of FeCl<sub>3</sub>

5) 987 grams of Ra(OH)<sub>2</sub>

6) 564 grams of copper

7) 12.3 grams of CO<sub>2</sub>

8) 89 grams of Pb(CH<sub>3</sub>COO)<sub>4</sub>

*Given the following, find the number of grams:*

9) 4 moles of Cu(CN)<sub>2</sub>

10) 5.6 moles of C<sub>6</sub>H<sub>6</sub>

11) 21.3 moles of BaCO<sub>3</sub>

12) 1.2 moles of (NH<sub>4</sub>)<sub>3</sub>PO<sub>3</sub>

13)  $9.3 \times 10^{-3}$  moles of SmO

14) 6.6 moles of ZnO

15) 5.4 moles of K<sub>2</sub>SO<sub>4</sub>

16) 88.4 moles of Ni<sub>3</sub>

## Grams/Moles Calculations – Answer Key

*Given the following, find the number of moles:*

- 1) 30 grams of H<sub>3</sub>PO<sub>4</sub> **0.31 moles**
- 2) 25 grams of HF **1.25 moles**
- 3) 110 grams of NaHCO<sub>3</sub> **1.31 moles**
- 4) 1.1 grams of FeCl<sub>3</sub> **0.0068 moles**
- 5) 987 grams of Ra(OH)<sub>2</sub> **3.80 moles**
- 6) 564 grams of copper **0.11 moles**
- 7) 12.3 grams of CO<sub>2</sub> **0.28 moles**
- 8) 89 grams of Pb(CH<sub>3</sub>COO)<sub>4</sub> **0.20 moles**

*Given the following, find the number of grams:*

- 9) 4 moles of Cu(CN)<sub>2</sub> **462 grams**
- 10) 5.6 moles of C<sub>6</sub>H<sub>6</sub> **436.8 grams**
- 11) 21.3 moles of BaCO<sub>3</sub> **4202.5 grams**
- 12) 1.2 moles of (NH<sub>4</sub>)<sub>3</sub>PO<sub>4</sub> **159.6 grams**
- 13) 9.3 x 10<sup>-3</sup> moles of SmO **1.5 grams**
- 14) 6.6 moles of ZnO **537.2 grams**
- 15) 5.4 moles of K<sub>2</sub>SO<sub>4</sub> **941.2 grams**
- 16) 88.4 moles of NI<sub>3</sub> **34679.3 grams**