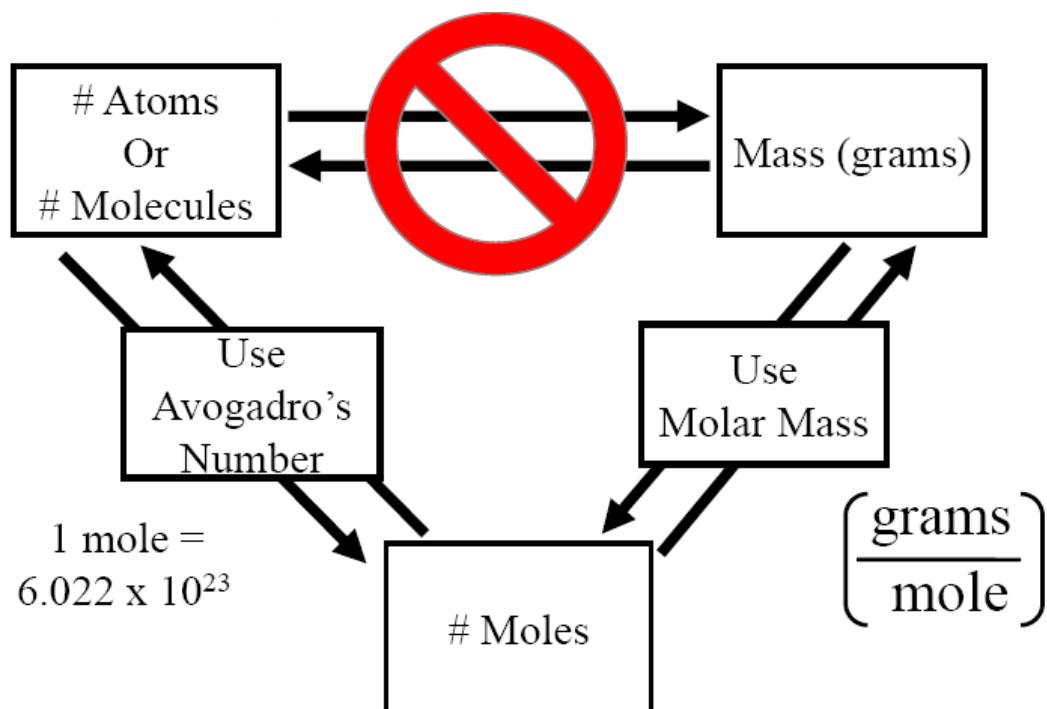


Moles, Molecules, and Grams Worksheet and Key



1) How many moles are there in 24.0 grams of FeF_3 ?

2) How many moles are there in 458 grams of Na_2SO_4 ?

3) How many grams are there in 2.30×10^{24} atoms of silver?

4) How many grams are there in 7.40 moles of AgNO_3 ?

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5) How many grams are there in 7.50×10^{23} molecules of H_2SO_4 ?

6) How many molecules are there in 122 grams of NO_2 ?

7) How many grams are there in 9.40×10^{25} molecules of H_2 ?

8) How many molecules are there in 237 grams of CCl_4 ?

9) How many molecules are there in 2.30 grams of NH_3 ?

10) How many grams are there in 3.30×10^{23} molecules of N_2I_6 ?

11) How many moles are there in 2.00×10^{19} molecules of CCl_4 ?

12) How many grams are there in 1.00×10^{24} molecules of BCl_3 ?

13) How many grams are there in 4.50 moles of $\text{Ba}(\text{NO}_2)_2$?

14) How many molecules are there in 9.34 grams of water?

15) How many grams do 4.30×10^{21} molecules of UF_6 weigh?

Moles, Molecules, and Grams Worksheet – Answer Key

- 1) How many moles are there in 24.0 grams of FeF_3 ? **.213 moles**
- 2) How many moles are there in 458 grams of Na_2SO_4 ? **3.22 moles**
- 3) How many grams are there in 2.30×10^{24} atoms of silver? **412 grams**
- 4) How many grams are there in 7.40 moles of AgNO_3 ? **1260 grams (note: 3 significant figures)**
- 5) How many grams are there in 7.50×10^{23} molecules of H_2SO_4 ? **122 grams**
- 6) How many molecules are there in 122 grams of NO_2 ? **1.60×10^{24} molecules**
- 7) How many grams are there in 9.40×10^{25} molecules of H_2 ? **315 grams**
- 8) How many molecules are there in 237 grams of CCl_4 ? **9.28×10^{23} molecules**
- 9) How many molecules are there in 2.30 grams of NH_3 ? **8.13×10^{22} molecules**
- 10) How many grams are there in 3.30×10^{23} molecules of N_2I_6 ? **433 grams**
- 11) How many moles are there in 2.00×10^{19} atoms of CCl_4 ? **3.32×10^{-5} moles**
- 12) How many grams are there in 1.00×10^{24} molecules of BCl_3 ? **195 grams**
- 13) How many grams are there in 4.50 moles of $\text{Ba}(\text{NO}_2)_2$? **1030 grams (3 significant figures)**
- 14) How many molecules are there in 9.34 grams of water? **3.12×10^{23} molecules**
- 15) How many grams do 4.30×10^{21} molecules of UF_6 weigh? **2.51 grams**