

Moles, Grams, and Atoms

Name:

1. How many moles are in a 2.30 g sample of Na?
2. How many moles are in a 5.00 g sample of H?
3. How many moles are in a 0.00190 g sample of F?
4. How many moles are in 710.0 g sample of Cl₂?
5. How many grams of Cu are in a 0.250 mole sample?
6. How many grams of AgNO₃ are in a 1.75 mole sample?
7. How many grams of BaCl₂ are in a 0.0500 mole sample?
8. How many grams of I₂ are in a 10.0 mole sample?
9. How many grams of C are in 1.00 atom?
10. How many grams of C are in 10.0 atoms?

11. How many grams of C are in 3000.0 atoms?
12. How many grams of P are in 1.00 atom?
13. How many grams of HCl are in 1.00 molecule?
14. How many grams of Zn are in 5.00×10^{23} atoms?
15. How many grams of HF are in 2.00×10^{20} molecules?
16. How many grams of $\text{HC}_2\text{H}_3\text{O}_2$ are in 1.00×10^2 molecules?
17. How many molecules are there in 2.00×10^{-4} g of H_2 ?
18. How many atoms are there in 4.40 g of O?
19. How many atoms are there in 4.00×10^2 g of Ca?
20. How many molecules are there in 1.60×10^{-4} g of CH_4 ?