

3. How many moles is 2.80×10^{24} atoms of silicon?
4. How many molecules is 0.360 mol of water?
5. How many atoms are there in 1.14 mol of SO_3 ?
6. How many moles are there in 4.65×10^{24} molecules of NO_2 ?
7. Find the gram molecular mass of each compound.
a) C_2H_6 b) PCl_3 c) $\text{C}_3\text{H}_7\text{OH}$ d) N_2O_5
8. What is the mass of 1.00 mol of each substance?
a) chlorine b) nitrogen dioxide c) carbon tetrabromide
9. Calculate the gram formula mass of each ionic compound.
a) K_2O b) CaSO_4 c) CuI_2
10. Find the gram formula mass of each compound.
a) barium fluoride b) strontium cyanide c) sodium hydrogen carbonate
11. Describe the relationship between Avogadro's number and one mole of any substance.
13. How many oxygen atoms are in each substance?
a) NH_4NO_3 b) $\text{C}_8\text{H}_8\text{O}_4$ c) O_3 d) $\text{C}_3\text{H}_5(\text{NO}_3)_3$
14. How many moles is each of the following?
a) 1.50×10^{23} molecules NH_3 b) 1×10^9 molecules O_2

c) 6.02×10^{22} molecules Br_2 d) 4.81×10^{24} atoms Li
47. Which contains more molecules: 1.00 mol H_2O_2 , 1.00 mol C_2H_6 , or 1.00 mol CO ?

More Practice Questions:

1. How many atoms are in 1.00 mole of sucrose, $\text{C}_{12}\text{H}_{22}\text{O}_{11}$?
2. How many atoms of C are in 2.0 moles of $\text{C}_{12}\text{H}_{22}\text{O}_{11}$?