

Work each of the following problems. SHOW ALL WORK.

1. How many atoms are contained in 3.46 moles of magnesium?
2. Convert 256.3 g sodium carbonate to formula units.
3. What is the mass of 12.4 molecules of carbon tetrachloride?
4. How many moles are contained in 0.43 g Al_2O_3 ?
5. The number of silicon atoms in 42.1 g of silicon is _____.
6. 11.6 g of $CuCl_2$ = _____ moles $CuCl_2$

7. Convert 2.76 g Se to moles Se.

8. What is the mass in grams of 9.31×10^{21} atoms of carbon?

9. 2.86 f.u. MgO = _____ moles MgO

10. How many grams of sodium is equal to 6.92×10^{21} atoms of sodium?

11. The mass of 3.55 moles of NaCl is _____.

BONUS

What is the mass, in kilograms, of 2.46×10^{20} formula units of barium chloride?