

### Part 1: Molar Mass

Use the periodic table to find the molar masses of the following.



### Part 2: Mole Conversions

Work each of the following problems. **SHOW ALL WORK.**

1. How many atoms are in 6.2 moles of aluminum.
2. Convert  $5.3 \times 10^{25}$  molecules of  $\text{CO}_2$  to moles.
3. How many formula units of sodium acetate are in 0.87 moles of sodium acetate?
4. Convert 3.55 moles  $\text{NaCl}$  to formula units.
5. Convert 3.00 moles  $\text{As}_2\text{S}_3$  to grams.

Work each of the following problems. SHOW ALL WORK.

6. How many moles are represented by 11.5 g of  $C_2H_5OH$ ?

7. What is the mass of 9.30 moles of  $SiH_4$ ?

8. Convert  $8.00 \times 10^{20}$  molecules of  $H_2$  to moles.

9. How many atoms of tin are found in 3.50 moles of tin?

10. How many grams of tin are found in 3.50 moles of tin?

**BONUS:** How many atoms of hydrogen are found in 12.6 moles of water?