

## Conversions Using Moles, Grams, Molecules, and Ions

1. How many moles are in 63.25 g of  $\text{Fe}_3(\text{PO}_4)_2$ ?
2. A sample contains 3.26 moles of  $\text{C}_3\text{H}_8$ . How many grams of  $\text{C}_3\text{H}_8$  does this correspond to?
3. How many sodium ions are in one mole of sodium carbonate,  $\text{Na}_2\text{CO}_3$ ?
4. How many acetaldehyde ( $\text{C}_2\text{H}_4\text{O}$ ) molecules are in 232.25 g?
5. How many atoms of carbon are in 25.65 g of  $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$  (caffeine)?