

CONVERTING MOLES TO PARTICLES

Converting between moles, particles and mass is an essential skill in Chemistry, and this is where dimensional analysis can help simplify mole conversion problems.

For example, if you have three and a half dozen roses and you want to know how many roses you have, you must first know the conversion factor for roses.

$$\text{Conversion Factor} = \frac{12 \text{ roses}}{1 \text{ dozen}}$$

CONVERSION FACTOR FOR MOLES=

$$\frac{6.02 \times 10^{23}}{1 \text{ mol}}$$

$$\frac{1 \text{ mol}}{6.02 \times 10^{23}}$$

MOLES TO ATOMS

Example: You have 3.5 moles of a substance, how many atoms do you have?