

f. Write and balance the equation for this reaction. (6 pts)

g. According to your balanced equation, what is the correct form of the mole-mole ratio needed to convert the number of moles of oxygen consumed to the number of moles of carbon dioxide produced? (2 pt)

h. How many moles of carbon dioxide are produced when 4.82×10^{24} molecules of oxygen gas are consumed? (7 pts)

Useful Formula

$$\% \text{ m/m} = \frac{\text{solute (g)}}{\text{solution (g)}} \times 100\%$$

$$C_i V_i = C_f V_f$$

$$M = \frac{\text{mol}}{\text{L}}$$

$$K_c = \frac{[\text{Products}]}{[\text{Reactants}]}$$