Worksheet: Some Basic Concepts of Chemistry

Rajasthan State Board · Class 11 · Chemistry · 5 questions · 15 marks

Name: _____ Date: _____ Score: _____ / 15

Q1. Calculate the mass of 0.5 moles of CaCO3 (Ca = 40, C = 12, O = 16). *[2 marks]*

Q2. A compound contains 92.3% C and 7.7% H by mass. Find its empirical formula. If its vapour density is 13, find the molecular formula. *[5 marks]*

Q3. How many grams of O2 are needed to completely burn 24 g of CH4? *[3 marks]*

Q4. Why is molarity temperature-dependent but molality is not? *[2 marks]*

Q5. 2 g H2 reacts with 16 g O2 to form water. Find the limiting reagent and the mass of water formed. *[3 marks]*