

Moles and calculations

Define moles: It is the amount of substance which is equal to the Avogadro's number of particles.

Avogadro's number or Avogadro's Constant = 6.02×10^{23} particles

Formulas for calculation of moles:

$$1. \quad \text{mole} = \frac{\text{mass}}{\text{Mass of one mole}}$$

Mass of one mole = molar mass = Mr or Ar

$$2. \quad \text{mole of any gas} = \frac{\text{Volume of gas in cm}^3}{\text{Volume of one mole of gas}} = \frac{\text{Volume of gas in dm}^3}{\text{Volume of one mole of gas}}$$

Volume of one mole of any gas = molar gas volume = 24000 cm^3 or 24 dm^3

$$3. \quad \text{mole of any substance} = \frac{\text{volume in dm}^3 \times \text{concentration in mol dm}^{-3}}{\text{(in the form of solution)}}$$

$$\text{Volume in dm}^3 = \frac{\text{Volume of solution in cm}^3}{1000}$$

$$4. \quad \text{percentage yield} = \frac{\text{Experimental yield}}{\text{Theoretical yield}} \times 100$$

$$5. \quad \text{percentage purity} = \frac{\text{Mass of pure substance}}{\text{Mass of impure substance}} \times 100$$

$$6. \quad \text{percentage composition by mass} = \frac{\text{No. of atoms} \times \text{Ar of atom}}{\text{Mass of total compound}} \times 100$$

$$7. \quad \text{molecular formula} = n \times \text{empirical formula}$$

$$\text{Where } n = \frac{\text{Molecular formula mass}}{\text{Empirical formula mass}}$$

Skill Practice 40 Moles And Formula Practice

Léo Pomar



Skill Practice 40 Moles And Formula Practice:

The Software Encyclopedia 2000 Bowker Editorial Staff,2000-05 **Army Public Schools Pgt & Tgt Screening Test 2022 Chemistry (12 Practice Sets)** Prabhat Prakashan,2023-10-01 The Book Army Public Schools PGT TGT screening Test 2022 Chemistry 12 Practice Sets 2022 consists of past 12 Practice Tests This book is for screening Test 2022 Chemistry covering 12 Practice Sets of Chemistry The complete chapter wise distribution of questions for all subjects is provided in the Table of Content Selected Stories of Honor de Balzac by Honor de Balzac In this collection Honor de Balzac presents a selection of his acclaimed short stories showcasing his incredible talent for vivid storytelling and character development With its rich language and engaging narratives this book is a must read for fans of classical literature Key Aspects of the Book Selected Stories of Honor de Balzac Collection of Short Stories The book features a collection of acclaimed short stories by Honor de Balzac Vivid Storytelling and Character Development The stories showcase Balzac s incredible talent for vivid storytelling and character development Useful for Literature Enthusiasts The book is useful for fans of classical literature and those interested in the works of Balzac Honor de Balzac was a French novelist and playwright who is regarded as one of the greatest writers of Western literature His book Selected Stories of Honor de Balzac is highly regarded for its captivating storytelling and rich language Student Study Guide and Solutions Manual to accompany General Organic and Biological Chemistry, 1e Kenneth W. Raymond,2005-10-07 Finally readers have a shorter less intimidating introduction to general organic and biological chemistry Not only is Raymond s text concise it also takes an integrated approach to presenting important topics in a way that makes the material easier to understand In this approach similarities can be exploited and concepts reinforced The result is that readers see the strong connections that exist between these three branches of chemistry Black Roadways Martha Warren Beckwith,1929 Holt Chemistry Ralph Thomas Myers,2004 Jawahar Navodaya Vidyalaya Entrance Class XI Book (English Edition) - 15 Practise Tests (1500 Solved Questions) EduGorilla Prep Experts, Best Selling Book in English Edition for JNV Jawahar Navodaya Vidyalaya Entrance Exam For Class XI with objective type questions as per the latest syllabus JNV Jawahar Navodaya Vidyalaya Entrance Exam For Class XI Preparation Kit comes with 15 Practise Tests with the best quality content Increase your chances of selection by 16X JNV Jawahar Navodaya Vidyalaya Entrance Exam For Class XI Prep Kit comes with well structured and 100% detailed solutions for all the questions Clear exam with good grades using thoroughly Researched Content by experts Chemistry John S. Phillips,Cheryl Wistrom,2000 **A-Level Chemistry for AQA: Year 1 & 2 Student Book** ,2020-10-05 This fantastic CGP Student Book comprehensively covers both years of AQA A Level Chemistry It s bursting with in depth accessible notes explaining every course topic plus all of the Required Practicals Everything s supported by clear diagrams photographs tips and worked examples Throughout the book there are lots of practice questions and exam style questions with answers at the back There s detailed guidance on Maths Skills and Practical Skills as well as indispensable advice for success in the final exams If you d

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