

MDCAT Chemistry Chapter 1 Introduction to fundamental concepts of chemistry Online Test

Sr	Questions	Answers Choice
1	5604 cm ³ of H ₂ gas at STP contains atoms of hydrogen	A. 6.02×10 ²³ B. 2.6×10 ²² C. 3.01×10 ²³ D. 1. 50x 10 ²³
2	Mg(s) + 2HCl(aq). ----- MgCl ₂ (aq)+ H ₂ (g) Given that; Mg=21g and HCl=21g, the excess reactant is	A. Mg B. HCl C. Both are in stoichiometric amounts D. None of these
3	One mole of SO ₂ contains	A. 6.022 x 10 ²³ atoms of oxygen B. 6.022x 10 ²³ atoms of sulfur C. 18.1x 10 ²³ molecules of SO ₂ D. 4 g molecule of SO ₂
4	How many electrons have to be removed to ionize 1.0 x 10 ⁽⁻⁶⁾ moles of Ne atoms to Ne ⁺ ions in a neon advertising tube:	A. 6.02x10 ²³ /1.0x10 ⁻⁶ B. 1.0x 10 ⁻⁶ x 6.02x 10 ²³ C. 1.0x10 ⁻⁶ x 6.02x10 ²³ /20.2 D. 1.0x10 ⁻⁶ x 6.02x10 ²³ /9.65x10 ⁻¹
5	1 gram formula refers to	A. Amount in grams equivalent to 1 mole of a atom B. Amount in grams equivalent to 1 mole of a covalent compound C. Amount in grams equivalent to 1 mole of a ionic compound D. Amount in grams equivalent to 1 mole of an ion
6	Number of H ⁺ ions when 0.1 mole of sulfuric acid is completely ionized in water	A. 4x6.022x10 ²³ B. 1x6.022x10 ²³ C. 2x6.022 x10 ²³ D. 2x6.022x10 ²²
7	1 gram molecule refers to amount in grams	A. Equivalent to 1 mole of an atom B. Equivalent to 1 mole of a molecule C. Equivalent to 1 mole of an ionic species D. Of an ionic compound
8	The stoichiometric calculations for a chemical reaction results in	A. Actual yield B. Percentage yield C. Theoretical yield D. Selectivity
9	Mass spectrometry is used to determine the	A. Number of isotopes of an element B. Relative abundance of isotopes C. Relative isotopic masses D. All of these