



## Chemistry Quiz - Questions and Answers

### Questions

**1. How many atoms make up a molecule of water?**

- a) 2
- b) 3
- c) 4
- d) 6

**2. What color is iodine when dissolved in water?**

- a) Red
- b) Green
- c) Yellow
- d) Brown

**3. What is combustion from a chemical point of view?**

- a) Substance is split into atoms
- b) Substance changes its state of aggregation to gaseous
- c) Substance reacts with hydrogen
- d) Substance reacts with oxygen

**4. Which of the following elements is not a noble gas?**

- a) Helium
- b) Neon
- c) Krypton
- d) Fluorine



**5. After which element is the state of Argentina named?**

- a) Platinum
- b) Gold
- c) Silver
- d) Iron

**6. Which of the following elements is not radioactive?**

- a) Lutetium
- b) Uran
- c) Neptunium
- d) Plutonium

**7. Which element is the most important in organic chemistry?**

- a) Carbon
- b) Hydrogen
- c) Nitrogen
- d) Oxygen

**8. What is the name of the chemical compound  $\text{NH}_3$ ?**

- a) Formaldehyde
- b) Ammonia
- c) Ethanol
- d) Methane

**9. What is the chemical formula and scientific name for common table salt?**

- a)  $\text{KMnO}_4$  – potassium permanganate
- b)  $\text{AgNO}_3$  – silver nitrate
- c)  $\text{BaSO}_4$  – barium sulphate
- d)  $\text{NaCl}$  - sodium chloride

**10. A solution with a pH of 5.0 is...?**

- a) Strongly alkaline
- b) slightly basic
- c) neutral
- d) slightly acidic



**11. What is characteristic of the alcohol group of substances?**

- a) A double carbon bond
- b) An OH group
- c) Annular structure
- d) Polymeric structure

**12. What special form of bonding exists between water molecules, among others?**

- a) Hydrogen bonding
- b) Ionic bond
- c) Metallic bond
- d) Coordinative bond

**13. Chemically, a diamond is...?**

- a) Silicon dioxide (SiO<sub>2</sub>)
- b) crystal of pure carbon (C)
- c) aluminum trioxide (Al<sub>2</sub>O<sub>3</sub>)
- d) crystal of pure iron (Fe)

**14. In chemistry, what property is called electronegativity?**

- a) The ability of an atom to attract pairs of electrons to itself in a chemical compound
- b) The charge of an electron
- c) The sum of the charges of all the electrons on the outermost shell of an atom
- d) The number of electrons a positively charged ion lacks to be electrically neutral

**15. When was the periodic table of the elements discovered or developed as an ordering scheme?**

- a) 1698
- b) 1733
- c) 1869
- d) 1902



## Answers

**1. How many atoms make up a molecule of water?**

b) 3 - Two hydrogen atoms and one oxygen atom: H<sub>2</sub>O

**2. What color is iodine when dissolved in water?**

d) Brown

**3. What is combustion from a chemical point of view?**

d) Substance reacts with oxygen

**4. Which of the following elements is not a noble gas?**

d) Fluorine belongs to the group of halogens

**5. After which element is the state of Argentina named?**

c) Silver - Latin name: Argentum

**6. Which of the following elements is not radioactive?**

a) Lutetium

**7. Which element is the most important in organic chemistry?**

a) Carbon - with a few exceptions, organic chemistry includes all carbon compounds

**8. What is the name of the chemical compound NH<sub>3</sub>?**

b) Ammonia

**9. What is the chemical formula and scientific name for common table salt?**

d) NaCl - sodium chloride



**10. A solution with a pH of 5.0 is...?**

d) slightly acidic - The pH scale goes from 0-14, with 0 being maximally acidic, 7 neutral and 14 maximally basic/alkaline.

**11. What is characteristic of the alcohol group of substances?**

b) An OH group - Ethanol, the drinking alcohol, for example, has the molecular formula  $C_2H_5OH$

**12. What special form of bonding exists between water molecules, among others?**

a) Hydrogen bonding

**13. Chemically, a diamond is...?**

b) crystal of pure carbon (C)

**14. In chemistry, what property is called electronegativity?**

a) The ability of an atom to attract pairs of electrons to itself in a chemical compound

**15. When was the periodic table of the elements discovered or developed as an ordering scheme?**

c) 1869 - and independently and almost simultaneously by the Russian chemist Dmitri Mendeleev and the German Lothar von Meyer