

CHEMISTRY

SAMPLE TEST QUESTIONS

- Which of the following substances is an element:
 - ammonia
 - helium
 - water
 - air
- An element with electron configuration $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$ is in the following period:
 - the fifth
 - the fourth
 - the first
 - the third
- An element with electron configuration $1s^2 2s^2 2p^6 3s^2 3p^3$ is in the following period:
 - the first
 - the fifth
 - the fourth
 - the third
- In which sequence of elements are there elements with the lowest ionization energy?
 - C, Si, Ge, Sn, Pb
 - Be, P, Ca, S, Mn
 - N, P, As, Sb, Bi
 - Na, K, Rb, Cs, Fr
- If an element is in the fourth period and in the second group, its atomic number is:
 - 15
 - 25
 - 20
 - 18
- If the atomic masses for calcium 40 and for phosphorus 31, then the molecular weight for primary calcium phosphate is:
 - 256
 - 218
 - 234
 - 236
- Of these molecules, the largest dipole moment is in:
 - nitrogen
 - hydrogen
 - hydrogen chloride
 - helium
- An element with atomic number 16 has the properties most similar to an element which atomic number is:

- a) 6
- b) 32
- c) 34
- d) 17

9. The molecular weight of tertiary calcium phosphate is: (Ca = 40, P = 31)

- a) 212
- b) 365
- c) 135
- d) 310

10. The relative atomic mass of iodine is 127. What is the mass of the molecule of that element?

- a) $4,23 \times 10^{19}$
- b) 254
- c) $2,11 \times 10^{-22}$
- d) $4,23 \times 10^{-22}$