1. Atomic number is the number of:
   A. Neutrons
   B. Protons
   C. Nucleons
   D. Shells (B)

Explanation : Atomic number is the number of protons in the nucleus.

2. Atomic number is denoted by:
   A. A
   B. Z
   C. N
   D. X (B)

Explanation : Atomic number is represented by Z.

3. Mass number is:
   A. Protons only
   B. Neutrons only
   C. Protons + neutrons
   D. Protons + electrons (C)

Explanation : Mass number is the sum of protons and neutrons.

4. Mass number is denoted by:
   A. Z
   B. A
   C. M
   D. P (B)

Explanation : Mass number is represented by A.

5. Number of neutrons =
   A. A + Z
   B. Z − A
   C. A − Z
   D. A × Z (C)

Explanation : Neutrons = mass number − atomic number.

6. Isotopes have same:
   A. Mass number
   B. Atomic number
   C. Neutrons
   D. Electrons always different (B)

Explanation : Isotopes of an element have the same atomic number but different mass numbers.

7. Chlorine isotopes are:
   A. 35 and 36
   B. 35 and 37
   C. 36 and 37
   D. 37 and 38 (B)

Explanation : Chlorine commonly has isotopes with mass numbers 35 and 37.

8. Isotope used in cancer treatment is of:
   A. Uranium
   B. Iodine
   C. Cobalt
   D. Carbon (C)

Explanation : An isotope of cobalt is used in cancer treatment.

9. Isobars have same:
   A. Atomic number
   B. Mass number
   C. Neutrons
   D. Electrons only (B)

Explanation : Isobars are atoms of different elements with the same mass number.

10. Average atomic mass of chlorine is:
    A. 35 u
    B. 35.5 u
    C. 36 u
    D. 37 u (B)

Explanation : Chlorine's relative atomic mass is 35.5 u due to isotopic abundance.