
NOW LET'S TRY SOME HOMEWORK QUESTIONS:

1. The total number of electrons in a neutral atom of every element is always equal to the atom's
 - (1) mass number
 - (2) number of neutrons
 - (3) number of protons
 - (4) number of nucleons

2. The mass of an electron is approximately equal to $\frac{1}{1836}$ of the mass of
 - (1) a positron
 - (2) a proton
 - (3) a beta particle
 - (4) an alpha particle

3. Which particle has a mass of approximately one atomic mass unit and a unit positive charge?
 - (1) a neutron
 - (2) a proton
 - (3) a beta particle
 - (4) an alpha particle

4. The atomic number of an atom is equal to the number of
 - (1) neutrons in the atom
 - (2) protons in the atom
 - (3) neutrons plus protons in the atom
 - (4) protons plus electrons in the atom

5. Compared to the entire atom, the nucleus of the atom is
 - (1) smaller and contains most of the atom's mass
 - (2) smaller and contains little of the atom's mass
 - (3) larger and contains most of the atom's mass
 - (4) larger and contains little of the atom's mass

6. The mass number of an atom is always equal to the total number of its
 - (1) electrons only
 - (2) protons only
 - (3) electrons plus protons
 - (4) protons plus neutrons

7. The nucleus of an atom of $^{127}_{53}\text{I}$ contains
 - (1) 53 neutrons and 127 protons
 - (2) 53 protons and 127 neutrons
 - (3) 53 protons and 74 neutrons
 - (4) 53 protons and 74 electrons

8. What is the mass number of an atom which contains 21 electrons, 21 protons and 24 neutrons?
 - (1) 21
 - (2) 42
 - (3) 45
 - (4) 66

9. Which of the following particles has the *least* mass?
 - (1) an electron
 - (2) a proton
 - (3) a deuteron
 - (4) a neutron