What is inside the atom?

1. What are the three subatomic particles? (AS1)

2. What were the three major observations Rutherford made in the gold foil experiment? (AS1)

3. Give the main postulates of Bohr's model of an atom. (AS1)

4. State the valencies of magnesium and sodium (AS1)

5. Compare the sub-atomic particles electron, proton and neutron.(AS1)

6. What are the limitations of J.J. Thomson's model of the atom?(AS1)

7. Define valency by taking examples of nitrogen and boron.(AS1)

8. What is the main difference among the isotopes of the same element?(AS1)

9. If Z = 5, what would be the valency of the element? (AS2)

10. Sketch Rutherford's atomic model. Why Rutherford's model of the atom is called the planetary model?(AS5)

11. Cl - has completely filled K, L & M shells. Explain it based on Bhor-Bury theory. (AS1)

12. Explain the efforts made by scientists to explain the structure of atom by developing various atomic models?(AS6)

1. Electron was invented by [ ]
a) Thomson b) Chadwick c) Goldstein d) Stoney

2. Proton was invented by [ ]
b) Thomson b) Chadwick c) Goldstein d) Stoney

3. Neutron was invented by [ ]
a) Thomson b) Chadwick c) Goldstein d) Stoney

4. α - particles are made up of the following primary particles [ ]
a) 2 protons and 2 neutrons b) 2 Protons and 2 Electrons
c) 2 Neutrons and 2 Positrons d) 2 Protons and 2 Neutrinos

5. Which model of atom is known as Planetary model [ ]
a) Thomson's model b) Rutherford's model
c) Bohr's model d) Modern atomic model

6. Valency of Aluminium is [ ]
a) 1 b) 2 c) 3 d) 4

7. The gas which is stable without octet configuration is [ ]
a) Neon b) Argon c) Radon d) Helium

8. The sum of the number of protons and neutrons in an atom is known as its [ ]
a) Mass number b) Atomic number c) Valency d) Ion number

9. Deuterium and Tritium are the Isotopes of — [ ]
a) Nitrogen b) Oxygen c) Hydrogen d) Helium

10. The electronic configuration of Sodium is [ ]
a) 2,8 b) 8,2,1 c) 2,1,8 d) 2,8,1