Worksheet Three:

Inside of an Atom

True /Fasle Questions

1. The center of an atom is called the **nucleus**.
2. **Electrons** are located inside the nucleus of an atom.
3. The **proton** carries a positive electric charge.
4. **Neutrons** have no electric charge.
5. Electrons are **heavier** than protons and neutrons.
6. The **mass of an atom** is mostly concentrated in the nucleus.
7. The nucleus contains **protons and neutrons**.
8. Electrons orbit the nucleus in specific energy levels or **shells**.
9. An atom becomes **positively charged** if it gains electrons.
10. The **number of protons** in an atom determines the element's identity.
11. **All atoms** of the same element have the same number of neutrons.
12. **Isotopes** are atoms with the same number of protons but different numbers of neutrons.
13. Electrons move in **fixed paths** like planets around the sun.
14. The **electron cloud model** is the modern understanding of atomic structure.
15. Protons and neutrons are made up of smaller particles called **quarks**.

Match the terms in **Column A** with the correct descriptions in **Column B**.

Column A	**Column B**
A. Proton	……. Center of the atom containing protons and neutrons
B. Neutron	…….. Negatively charged particle in an atom
C. Electron	…… Has no electric charge and found in the nucleus
D. Nucleus	…… Positively charged particle in the nucleus
E. Atomic Number	…… The total number of protons and neutrons in an atom
F. Mass Number	……. Region around the nucleus where electrons are likely to be found
G. Electron Shell	…… The number of protons in an atom
H. Isotope	…… Atoms of the same element with different numbers of neutrons
I. Charge of Electron	…… The average mass of all isotopes of an element
J. Atomic Mass	…… –1 (negative one)