

The periodic table is used to arrange elements in a way that allows people to understand the various behaviours and trends that characterise them. A nucleus, is at the centre of an atom, and it contains positively charged protons and neutrons, which have no charge. Electrons travel around the positive nucleus and they are held in shells. Each symbol has an atomic number that indicates the number of protons in the atom, and a mass number that indicates the number of protons and neutrons within an atom. The number of protons is usually equal to the number of electrons, although ions are formed when the net charge is not zero. Positively charged ions are called cations, whereas negatively charged ions are called anions.