Periodic Table Organization

-The periodic table is arranged in order of increasing atomic number

-Elements are grouped according to similar properties

-Horizontal rows are called periods – within periods the atomic number increases, the electron cloud also increases within periods, and an example of this is that elements within period 3 have a larger electron cloud than elements in period 1.

-Vertical columns are called groups or families – within groups/families elements have similar properties, elements form the same ions within groups, noble gases are stable or unreactive, and elements have the same number of valence electrons.

Classification of Elements

Metals – Make-up most the elements, they are located to the left of the metalloids, and Alkali metals are the most reactive metals

Non-Metals – Located to the right of the metalloids, and Halogens are the most reactive non-metals

Metalloids – Make-up the “staircase”/separation of metals from non-metals