Atomic Mass → x

A_z ← Atomic Number

$A = n + p$

$z = p = e$

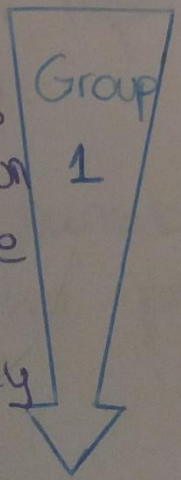
Electron configuration

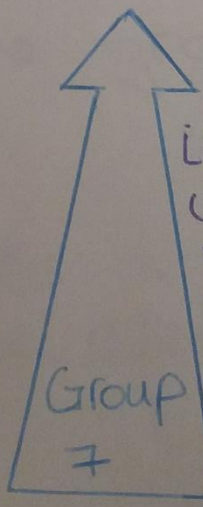
1st shell → 2 e^-

2nd shell → max. 8 e^-

3rd shell → max. 8 e^-

Reactivity increases as you go down because the electrons are further away the nucleus so they are given up more easily





Reactivity increases as you go up because of the same thing as in group 1