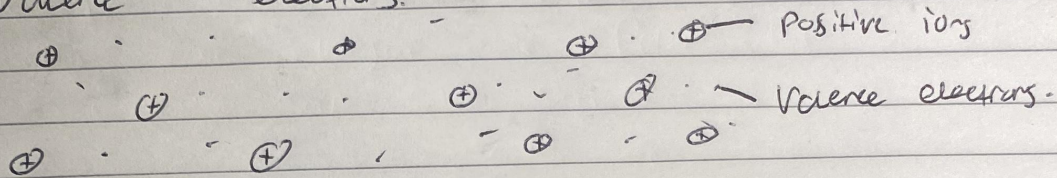


2)

a) Metallic bonding is seen as a cloud of positively charged ions within a cloud of valence electrons.



The Valency determines the number of atoms they are reacting with each other in compounds. Metals with a valency of ~~one~~ ^{two} are generally stronger than those that have one. This is due to having more 'free electrons' and are capable of adding more to the metallic bond, therefore strengthening the metal.

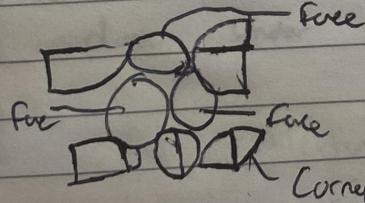
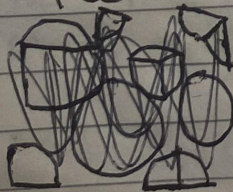
b)

BCC (Body-centred Cubic)



The BCC unit Cell will have atoms in each corner plus one full atom in the centre of the cube.

FCC (Face-centred Cubic)



FCC are where atoms at each corner of the cube and six atoms at face of the cube.