1) Only electrons in the highest energy shell seem to be involved with chemical reactions. We call this shell the "Valence" shell.

2) Lewis structures are a convenient way of keeping track of valence shell electrons.

3) Bonding occurs to allow atoms to gain full valence shells; either by gaining or losing electrons (ionic bonds) or sharing electrons (covalent bonds).

4) Not all atoms share electrons evenly in a covalent bond. Some atoms are greedy and want electrons more than others. This is electronegativity.