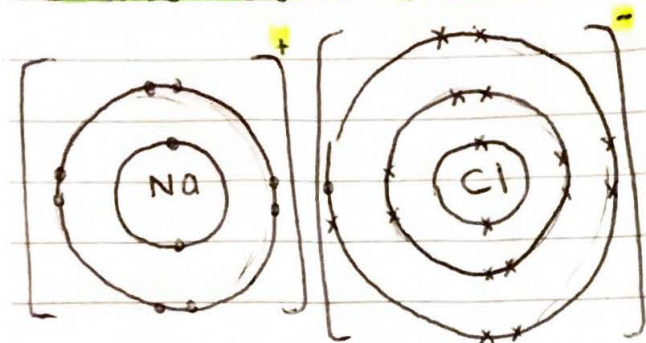
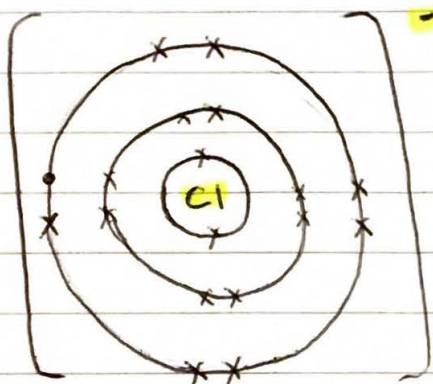


1) Describe how sodium and chlorine react to form an ionic bond.



Sodium gives up its outer electron to become a positive ion. Chlorine gains this electron to become a negative ion.

2) Draw the electron configuration of a chlorine ion.



Chloride ion

Cl^-

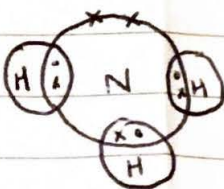
$[2, 8, 8]^-$

3) What holds giant ionic compounds together? What are their properties?

Ionic compounds are held together by very strong electrostatic forces between oppositely charged ions.

They have high melting and boiling points due to many strong bonds between the ions. Solid ionic compounds can't conduct electricity because they can't move. However, when they are ~~met~~ melted, ions are free to move and can conduct.

3) Draw the covalent bond for ammonia, NH_3



3) What are the four state symbols?

(g) - gas

(l) - liquid

(s) - solid

(aq) - aqueous