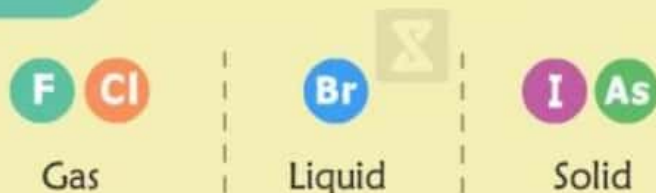


HALOGENS

1 Physical State



3 REACTIVITY

Reactivity decreases down the group as it is harder to add electrons.

F is the most reactive



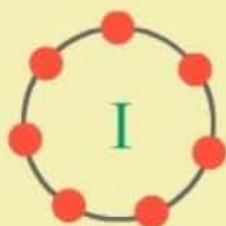
5 INTER HALOGEN

Halogens combine with each other to form series of compounds like



Large molecules can accommodate more halogens like in IF_7

Small fluorine can't accommodate many halogens like in FCl_2



7 VARIABLE OXIDATION STATES

Halogens exhibit variable oxidation states, starting from -1 to 7 .

Fluorine can't show positive oxidation state.

9 USES

Fluorine is used in Tooth Paste



Chlorine is used as a Bleaching Agent



Iodine is used in Disinfectants



Bromine is used for developing Photographic films



2 ELECTRONIC CONFIGURATION



They have **seven** valence electrons

GENERAL CONFIGURATION
 $ns^2 np^5$

4 ACIDITY



Acidity decreases down the group

HF is the strongest acid which can dissolve glass also.

6 CHLORINE IN WAR FARE

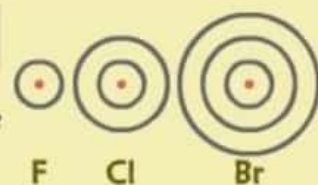


Germany used chlorine in world war- I against France.

Chlorine gas **destroys** respiratory organs.

8 ELECTRONEGATIVITY

Atomic size increases down the group, therefore electronegativity decreases down the group.



F Cl Br

