

Group 7

Chemistry

The halogens, and why reactivity decreases down the group.

Physical state and displacement behaviour.

Halogen	State at RTP	Displaces
Fluorine	Pale yellow gas	All below it
Chlorine	Green gas	Br, I
Bromine	Red-brown liquid	I only
Iodine	Grey solid	None

A more reactive halogen displaces a less reactive one from its salt: $\text{Cl}_2 + 2\text{KBr} \rightarrow 2\text{KCl} + \text{Br}_2$.