

Chemical Families

1. List the names and symbols of all Halogens

F [Flourine], Cl [chlorine], Br [Bromine], I [Iodine], At [Astatine]

Both
↑ Halogen
and
Metalloid

2. Why are the Halogens said to be one electron short of stability?

They are one electron short of stability because their valence shell has 7 electrons, which means they will do anything to become stable, or gain one electron.

3. Are the Halogens reactive? What are common properties of them?

Yes, Halogens are quite reactive. They like to bond with elements of the first group. They are also quite effective with disinfection of water.

4. What are the Halogens used for? Give two examples.

Flourine: Tooth Paste and Mouthwash

Chlorine: Disinfect pools, Bleach (household)

Bromine: Disinfect pools, Fire retardants (no fire)

Iodine: Disinfect wounds, make thyroid hormones (with metalloids)

Astatine: Radioactive tracer, Thyroid cancer treatment

