

9
F

Fluorine

17
Cl

Chlorine

35
Br

Bromine

53
I

Iodine

85
At

Astatine

117
Uus

Ununseptium

Group 17 - The Halogens

GROUP 17 IS THE ONLY GROUP THAT CONTAINS ELEMENTS IN ALL THREE STATES OF MATTER. THEY ARE ALL REACTIVE NON-METALS


IODINE & ASTATINE
SOLIDS AT ROOM TEMPERATURE

BROMINE
LIQUID AT ROOM TEMPERATURE

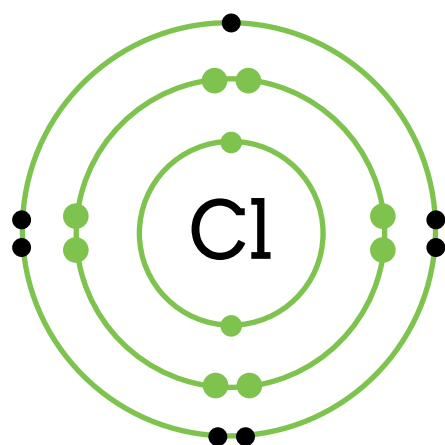
FLUORINE & CHLORINE
GASES AT ROOM TEMPERATURE

THE
HALOGENS
ALL FORM
DIATOMIC
MOLECULES
EXCEPT
FOR
ASTATINE



HYDROFLUORIC ACID
LEACHES CALCIUM FROM
BONES AND CAN CAUSE
VERY PAINFUL BURNS

IT ALSO
DISSOLVES GLASS



**ALL
OF THE
GROUP 17 ELEMENTS
HAVE
SEVEN
VALENCE ELECTRONS**

THE HALOGENS
REACT WITH
OXYGEN TO FORM
HALOGEN OXIDES

THE HALOGENS
REACT WITH
METALS TO FORM
METAL HALIDES

THE HALOGENS
ARE USED AS
OXIDISING AGENTS

WHILST
HALIDE IONS
ARE USED AS
REDUCING AGENTS



THE **REACTIVITY** OF THE HALOGENS
DECREASES DOWN THE GROUP
AS IT BECOMES HARDER TO
ADD AN ELECTRON

1 GRAM

ESTIMATED AMOUNT OF
ASTATINE
IN THE EARTH'S CRUST
AT ANY ONE TIME

USES OF THE HALOGENS


FLUORINE

TOOTHPASTE
REFRIGERANT
GASES


CHLORINE

BLEACH
CHEMICAL
WARFARE


BROMINE

FIRE RETARDANT
MATERIALS


IODINE

DISINFECTANTS