## TASKS:

1. Read the text "The Halogens Family" and answer the questions:

Why are halogens found only in the form of ions or compounds? (because of their high reactivity) Do all halogens react with hydrogen? (No. astatine doesn't)

What sort of compounds do halogens form when combined with metals? (metal halides) Which halogen is used for treating domestic water supplies and swimming pool water? What does it do? (Chlorine and bromine; They kill bacteria and other potentially harmful microorganisms)

2. Read the text "The Halogens Family" again and look at the periodic table. Complete the table below.

Atomic number	Element	Symbol	state, colour at room temperature
9	Fluorine	F	pale yellow gas
		CI	
35			
53		l	
85	Astatine		

3. Look at the definitions (refer to the Word list) of fluorine, chlorine, bromine, iodine and astatine. What other qualities not mentioned in the text have you noticed in the definitions?

Fluorine: nonmetallic, toxic, corrosive, occurs occurs combined, especially in fluorite, cryolite,

phosphate rock, and other minerals

Chlorine: heavy, incombustible, water-soluble,

Bromine: *fuming, toxic* lodine: *nonmetallic* 

Astatine: highly unstable, radioactive, the heaviest of the halogen series, resembles iodine in

solution.

4. Choose the word from the box and complete the text:

Negative, purple, gases, diatomic, green, VII, bromine, red, poor, iodine, non-metals, highly, fluorine, solid.

The Group elements are and called the Halogens. The first two, and chlorine, are ,
the third,, is a liquid, and the 4 <sup>th</sup> , iodine, is a Chlorine is a gas, bromine is a dark
liquid and is a dark grey solid. When heated, iodine forms a vapour. The halogens are
conductors of heat and electricity even when solid or liquid. Halogens' molecules are
form ions and are reactive.

ANSWER: The group VII elements are non-metals and called the Halogens. The first two, fluorine and chlorine, are gases, the third, bromine, is a liquid and the 4<sup>th</sup>, iodine, is a solid. Chlorine is a green gas, bromine is a dark red liquid and iodine is a dark grey solid. When heated, iodine forms a purple vapour. The halogens are poor conductors of heat and electricity even when solid or liquid. Halogens' molecules are diatomic. They tend to form negative ions and are highly reactive.