

Elements in Group 7 (halogens)

A. Write down the names or symbols of the first 5 elements in Group 7

1. _____

2. _____

3. _____

4. _____

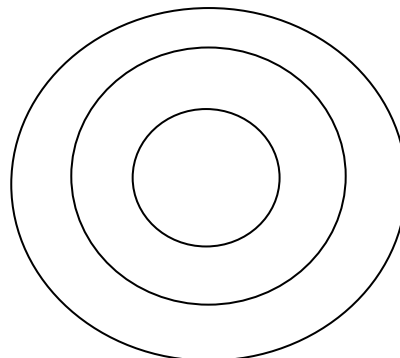
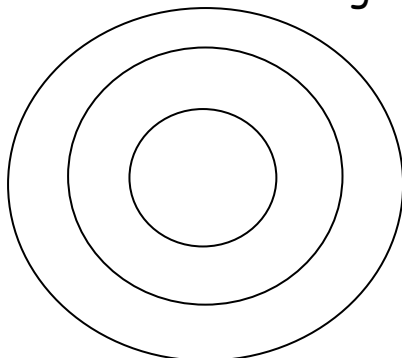
5. _____

B. Write down the electron arrangement for Fluorine and Chlorine

1. Fluorine: atomic number 9: _____

2. Chlorine: Atomic number 17: _____

C. Draw the arrangement of fluorine and Chlorine below



D. What do you notice about the number of electrons in the outer shell?

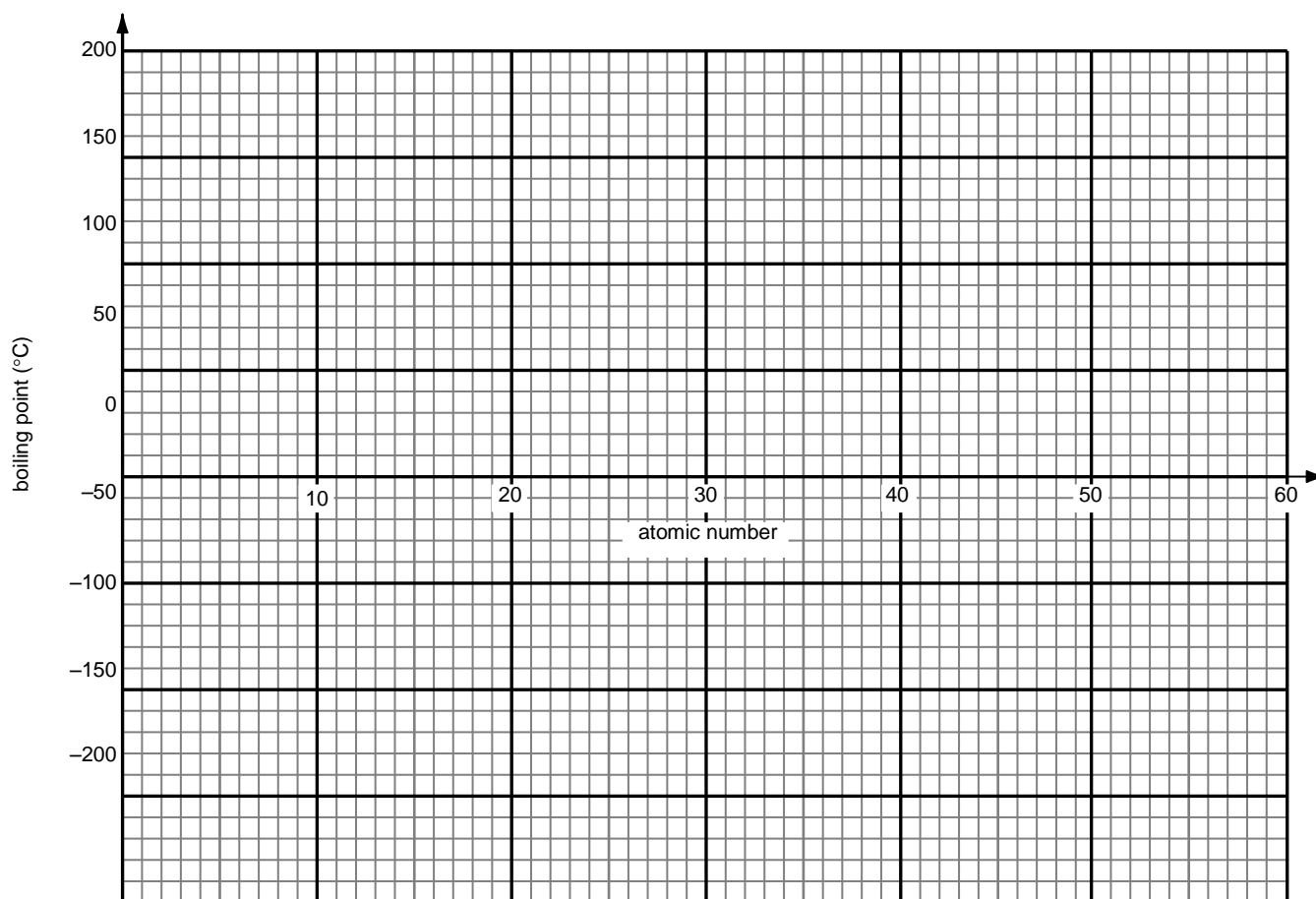
E. how many more electrons would it need to make a full shell? _____

Trends in Group 7 - The Halogens

Look at the table below:

halogen	atomic number	boiling point (°C)
fluorine	9	-188
chlorine	17	-34
bromine	35	58
iodine	53	184

Plot this information on the graph below:



Questions

1 What is the pattern going down Group 7?

2 Which halogens are gases at room temperature (25 °C)?

3 Astatine is below iodine in Group 7.
Predict its physical state at room temperature. _____