

### Group 7 Exam Style Questions

1. Complete the table to show the state at room temp, the colour of the pure substance and the colour of the solution of each of the halogens.

Halogen	State at room temp.	Colour of pure substance	Colour of solution
Fluorine, F <sub>2</sub>			
Chlorine, Cl <sub>2</sub>			
Bromine, Br <sub>2</sub>			
Iodine, I <sub>2</sub>			

2. Put the following elements in order of increasing reactivity – iodine, chlorine, fluorine, bromine.

3. Explain why you have put them in this order.

4. State and explain what would be observed if chlorine is added to a solution of sodium bromide.
  
  
  
  
  
  
  
  
  
  
5. Write a balanced symbol equation for the reaction that occurs.
  
  
  
  
  
  
  
  
  
  
6. State and explain what would be observed if bromine is added to a solution of sodium chloride.
  
  
  
  
  
  
  
  
  
  
7. Write a balanced symbol equation for the reaction between fluorine and potassium iodide solution. How would the colour of the solution change during the reaction?