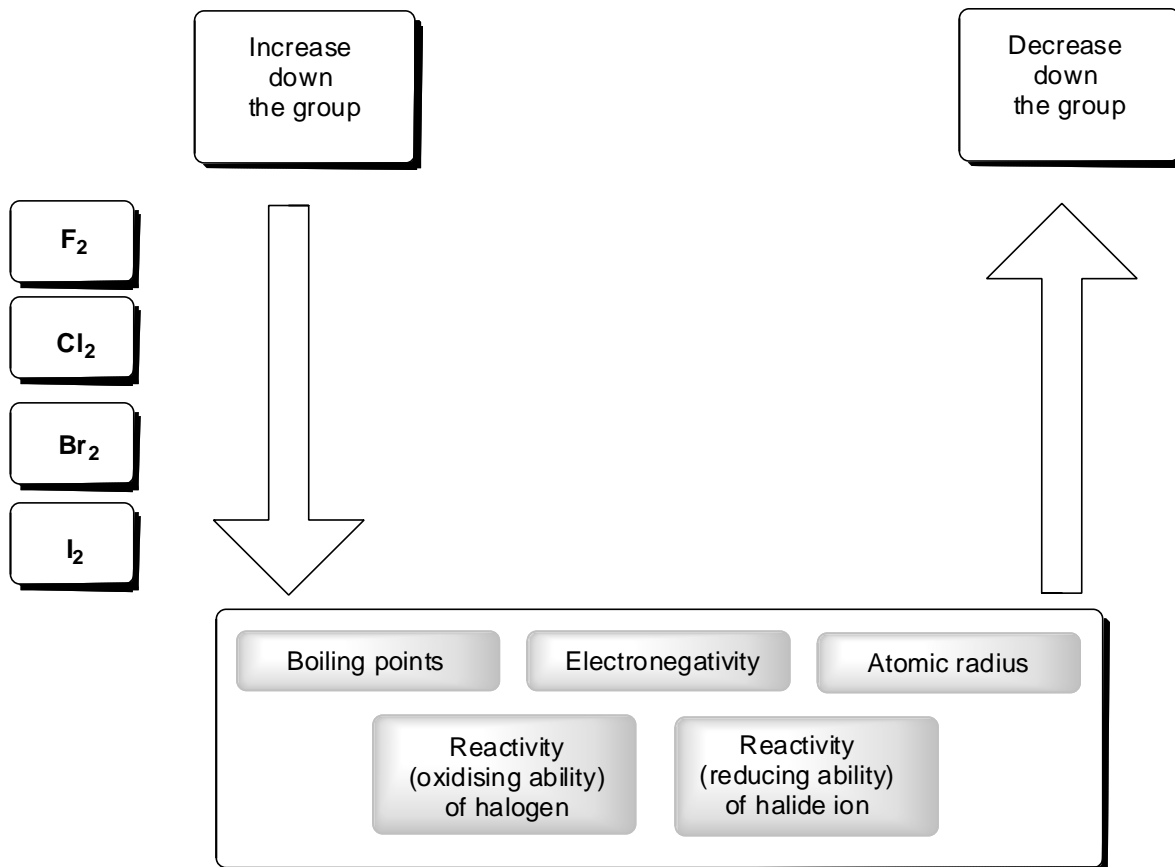




STARTER FOR 10...

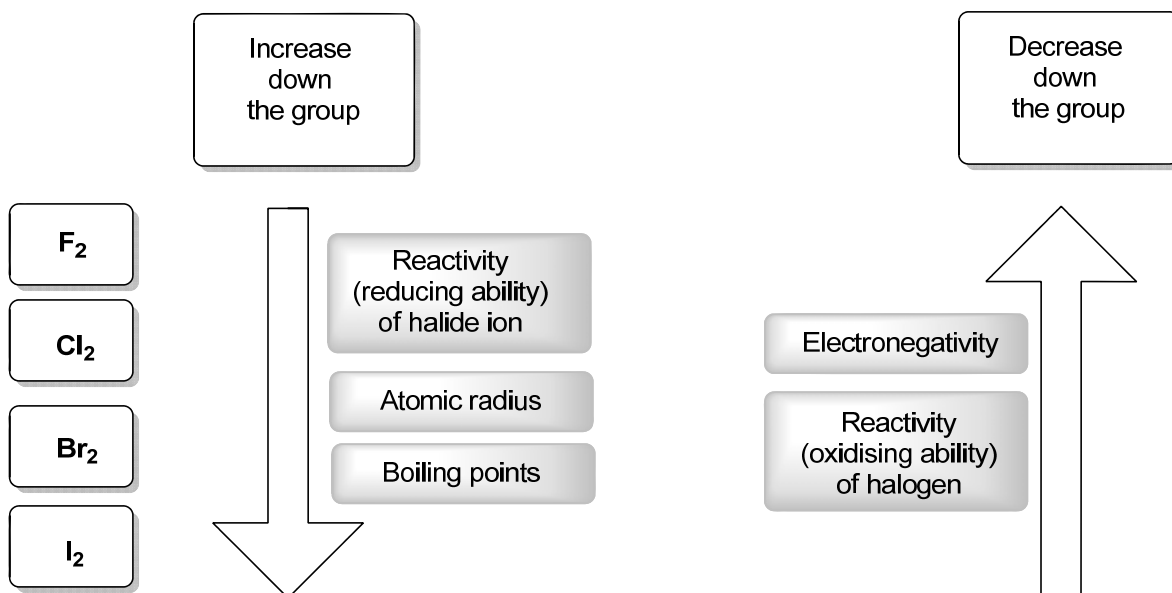
4.3 Group 7 trends



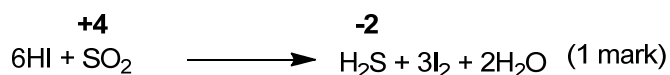
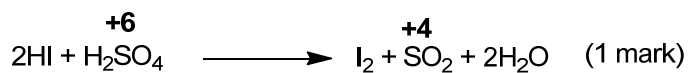
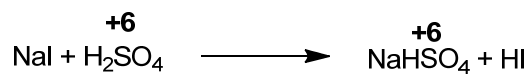
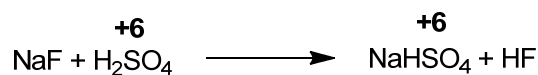
1. Complete the diagram showing the general trends in Group 7 by choosing properties from the grey boxes to annotate the arrows. (5 marks)
2. The trend in the reducing ability of the halide ions can be illustrated by the reaction of sodium halides with sulfuric acid. Illustrate this trend using the equations for NaF and NaI and the O.S numbers for sulfur. Write a conclusion stating what your equations show. (5 marks)

4.3

1.



2.



(1 mark for both of these equations)

(1 mark for correct O.S for each compound, H_2SO_4 , NaHSO_4 , SO_2 , H_2S at least once in answer)
 I⁻ is more reducing because it can reduce sulfur from O.S +6 to O.S -2, F⁻ cannot reduce S
 (1 mark must include statements about **both** I⁻ and F⁻ **QoL**).