CC13 Groups in the Periodic Table

Topic Progression Checklist

I know this → colour green	I'm not sure → colour yellow	I don't know this → colour red

Subtopics and Learning Objectives	Start	End
CC13a Group 1		
Explain the classification of alkali metals, halogens and noble gases, into groups in the periodic table.		
Describe the main physical properties of alkali metals.		
Describe the reactions of lithium, sodium and potassium with water.		
Write word, balanced and H ionic equations (including state symbols) for the reactions of alkali metals.		
Describe the pattern of reactivity of the alkali metals.		
Explain how the electronic configurations of the atoms of alkali metals affect their reactivity.		
CC13b Group 7		
Recall the appearance of chlorine, bromine and iodine at room temperature.		
Describe the trends in colour, melting point and boiling point of chlorine, bromine and iodine down the group, and use these to predict physical properties of other halogens.		
Describe the chemical test for chlorine gas.		
Describe the trends in the reactions of halogens with metals, and use this to predict reactions of other halogens.		
Write word and balanced chemical equations, including state symbols, for the reactions of halogens with metals.		
Describe hydrogen halides and their chemical properties.		
CC13c Halogen Reactivity		
Describe the relative reactivity of halogens.		
Explain how the reactivity of halogens can be worked out from displacement reactions.		
Write balanced chemical equations, including state symbols, for the displacement reactions of halogens.		
H Explain how displacement reactions are examples of redox reactions.		
H Write ionic equations, including state symbols, for displacement reactions of halogens.		
Explain the order of reactivity of halogens (using electronic configurations).		
CC13d Group 0		
Explain why noble gases are chemically inert by referring to their electronic configuration.		
Describe uses of noble gases linked with their properties.		

Describe the trends in the physical properties of the noble gases.		
Use trends in physical properties to predict the physical properties of other noble gases.		