Alcohols

Specification reference	Checklist questions	
4.2.1 a i	Can you describe the polarity of alcohols and explain, in terms of hydrogen bonding, the water solubility and the relatively low volatility of alcohols compared with alkanes?	☐
4.2.1 a ii	Can you classify alcohols into primary, secondary and tertiary alcohols?	☐
4.2.1 b	Can you explain combustion of alcohols?	☐
4.2.1 c i	Can you explain oxidation of alcohols by an oxidising agent (e.g. $Cr_2O_7^{2-}/H^+$), including the oxidation of primary alcohols to form aldehydes and carboxylic acids; and the control of the oxidation product using different reaction conditions?	☐
4.2.1 c ii	Can you explain oxidation of alcohols by an oxidising agent (e.g. $Cr_2O_7^{2-}/H^+$), including the oxidation of secondary alcohols to form ketones?	☐
4.2.1 c iii	Can you explain oxidation of alcohols by an oxidising agent (e.g. $Cr_2O_7^{2-}/H^+$), including the resistance to oxidation of tertiary alcohols?	☐
4.2.1 d	Can perform an experiment in which you eliminate H_2O from alcohols in the presence of an acid catalyst (e.g. H_3PO_4 or H_2SO_4) and heat to form alkenes?	☐
4.2.1 e	Can perform an experiment in which you substitute with halide ions in the presence of acid (e.g. $NaBr/H_2SO_4$) to form haloalkanes?	☐