



1 Complete this table with the names, structures and functional groups of some organic compounds.

displayed formula				
name	propanol	propene	ethanoic acid	butane
functional group	alcohol / -OH	alkene / C=C	carboxylic acid / -COOH	(alkane)

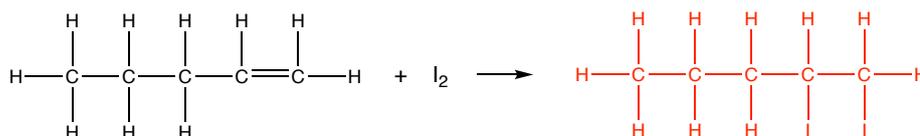
2 Identify the functional group in each of the following organic compounds.

molecule	add bromine water	add sodium	add sodium carbonate	is it miscible with water?	functional group
A	colourless	no reaction	no reaction	*	alkene / C=C
B	yellow-orange	fizzes	fizzes	✓	carboxylic acid / -COOH
C	yellow-orange	fizzes	no reaction	✓	alcohol / -OH

3 Pentene reacts with iodine.

a Name the type of reaction taking place. **addition**

b Complete the equation for this reaction.



4 Propanoic acid is a weak acid

a What is a weak acid?

acid = substance that reacts with water to form H⁺ ions

weak acid = only a small fraction of the molecules react with water to form H⁺ ions

b Estimate the pH of 0.10 mol/dm³ propanoic acid (aq) **3 to 5 ish**