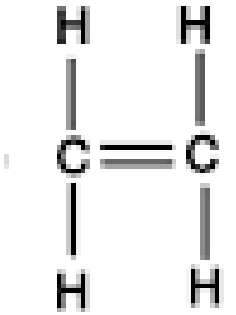
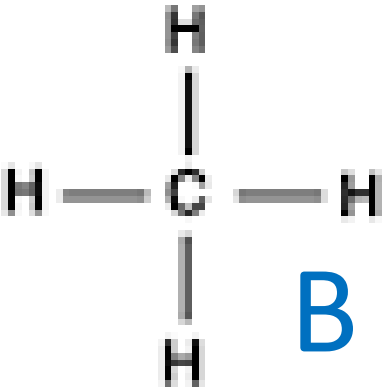
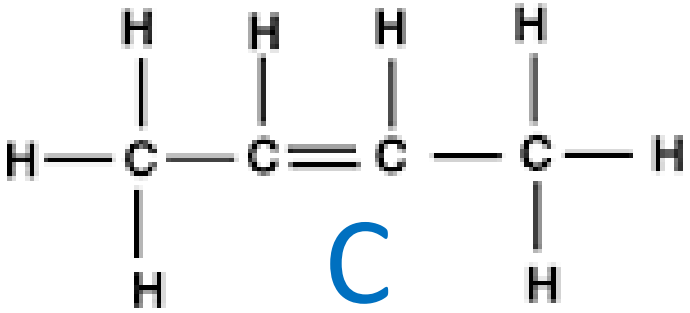
Can you identify each molecule below?



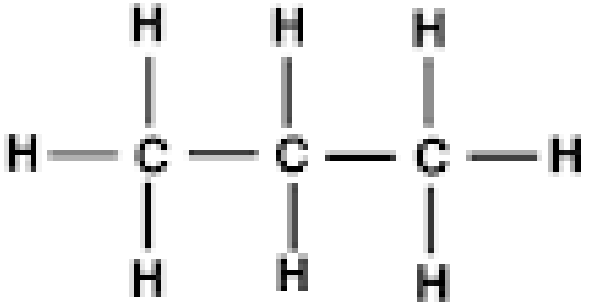
A



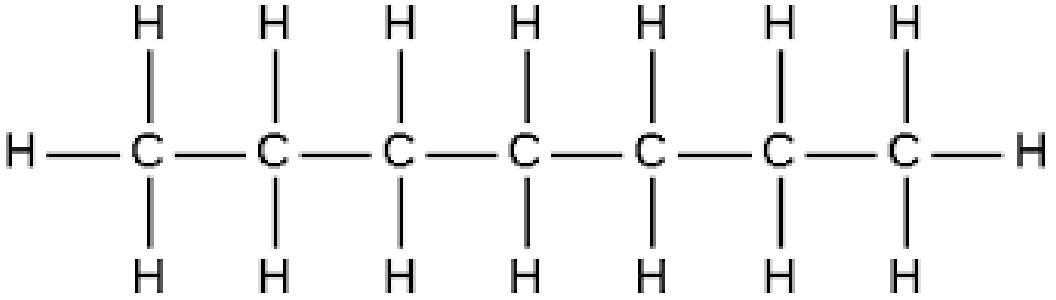
B



C

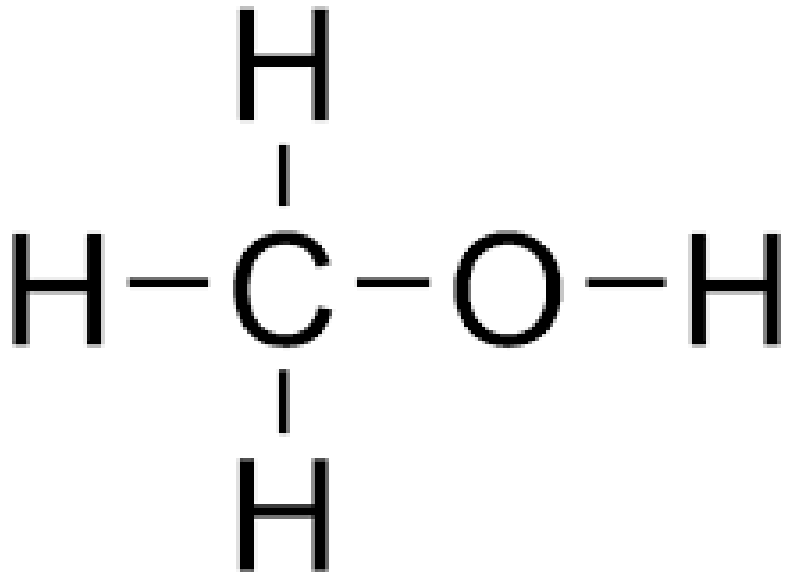


E



D

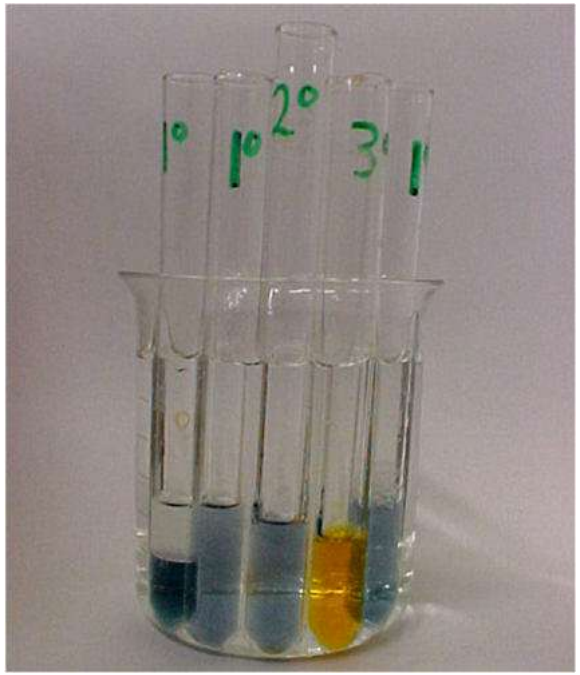
So….what is an alcohol then??



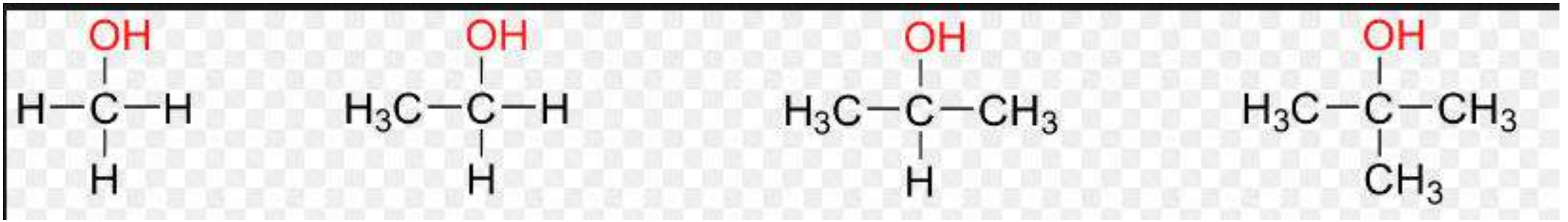
Contain the OH functional group, also known as the hydroxyl group

Experiment

‘Oxidation with acidified potassium dichromate’

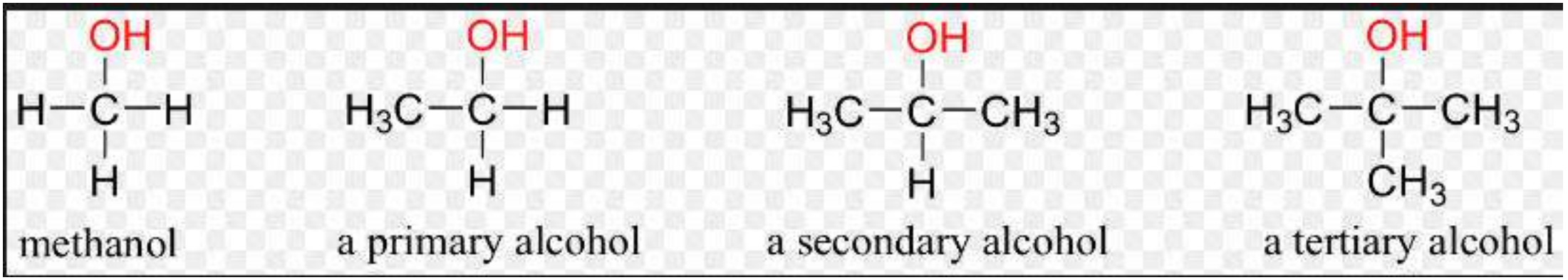


3 main types…



What’s the difference?

3 main types…



What's the difference?

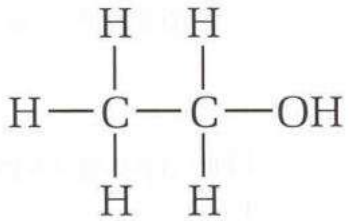
Task

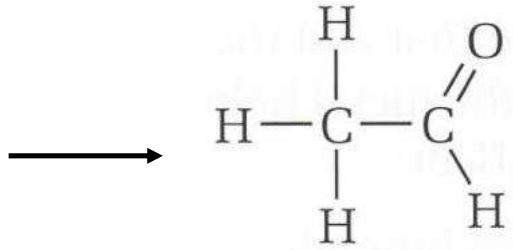
- Use the moly mods to make the alcohol on your card
- Go around the room and look at the other alcohol models that have been made
- Can you identify them as either primary, secondary or tertiary?

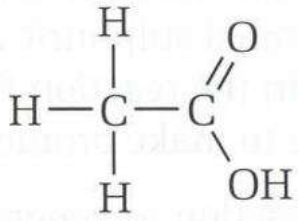
Experimental results

- Look at the alcohols you oxidised at the beginning of the lesson
- Which ones have changed colour?
- Can you identify them as primary, secondary or tertiary?
- Why do you think this happens?

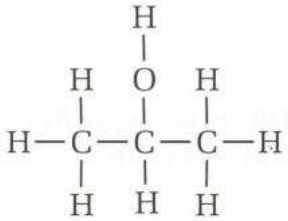
Oxidation of alcohols

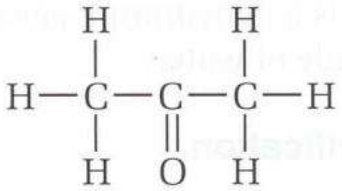




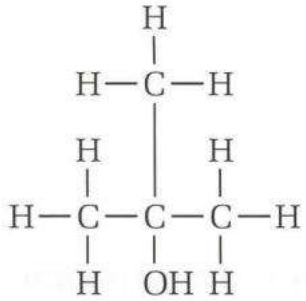


Primary alcohols aldehydes Carboxylic acid





Secondary alcohol Ketones



Don’t oxidise

tertiary alcohol