

# 3.8 ALDEHYDES AND KETONES

## Structure

Aldehydes and ketones both contain a carbonyl group, C=O

Easily separated

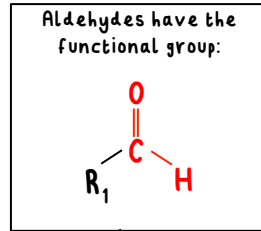
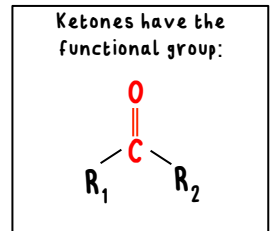
Aldehydes have the suffix -al

E.g. Propanal

Ketones have the suffix -one

E.g. Propanone

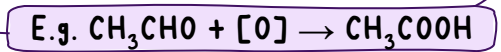
Functional groups



## Oxidation

Ketones do not easily undergo oxidation

Aldehydes are oxidised to carboxylic acids



[O] represents the oxidising agent

Use of oxidation reactions to distinguish between aldehydes and ketones

Fehling's solution

The blue solution is reduced to a brick-red precipitate

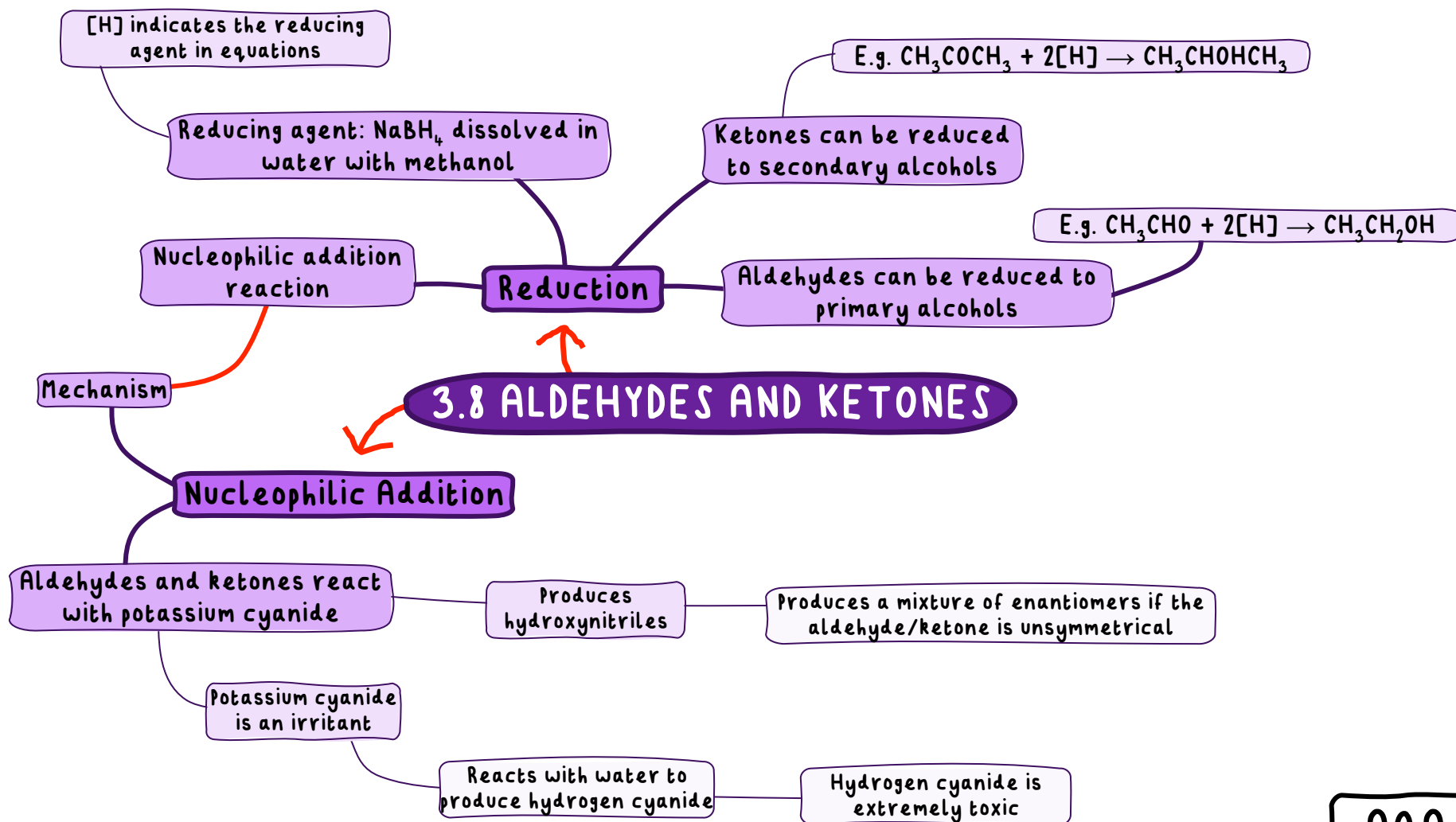
No reaction in the presence of a ketone

Tollens' reagent

Silver mirror forms on the test tube

Due to presence of aldehyde

**AQA**



**AQA**

