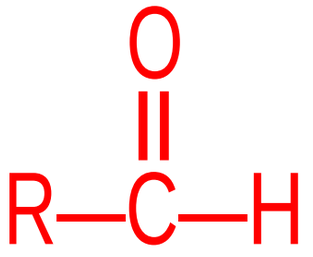
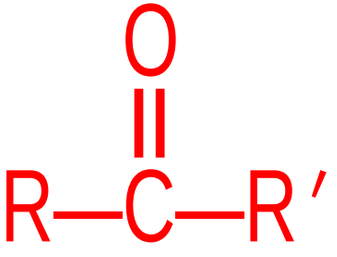
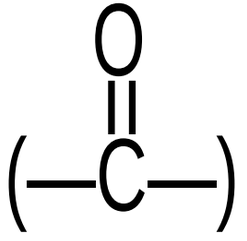
ORGANIC CHEMISTRY LESSON 5

Aldehydes and Ketones

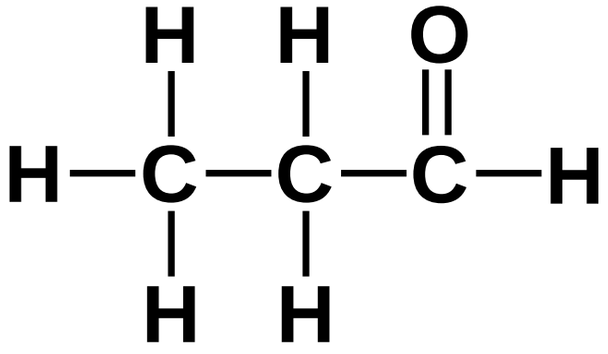
Primary Learning Goals

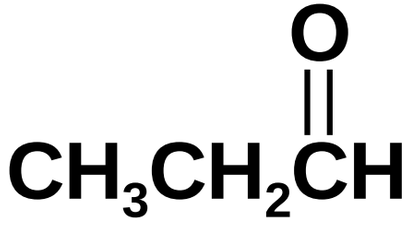
I can use IUPAC conventions to write systematic names and draw structures for aldehydes and ketones.

I can name, describe, and recognise various chemical reactions involving aldehydes and ketones, and predict the products of these reactions.

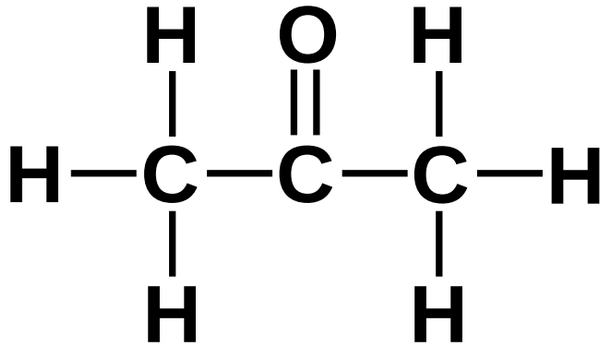
	Aldehydes	Ketones
Generic Structure:		
Functional Group:	carbonyl group 	
Nomenclature:	“-al” suffix	“-one” suffix

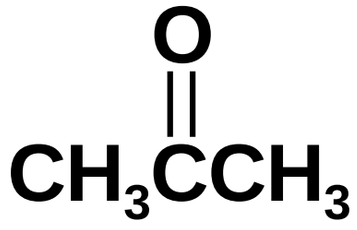
examples





propanal



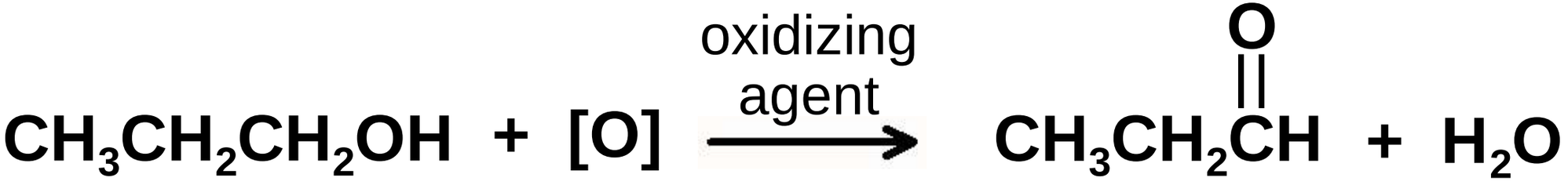


propan-2-one

(acetone)

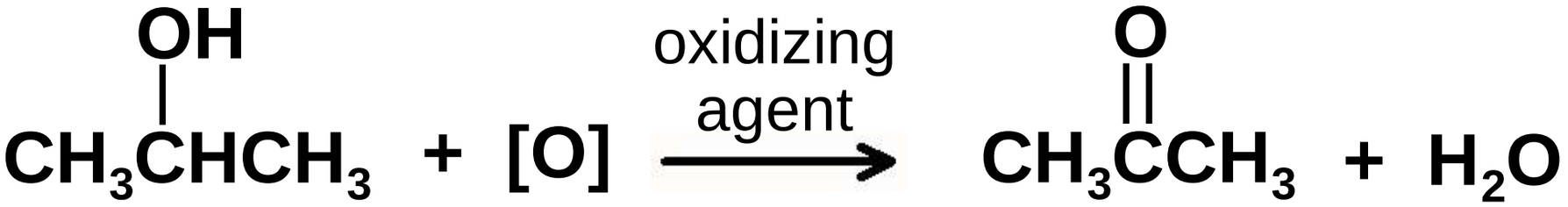
Reactions:

1. Controlled oxidation of a primary alcohol produces an aldehyde.



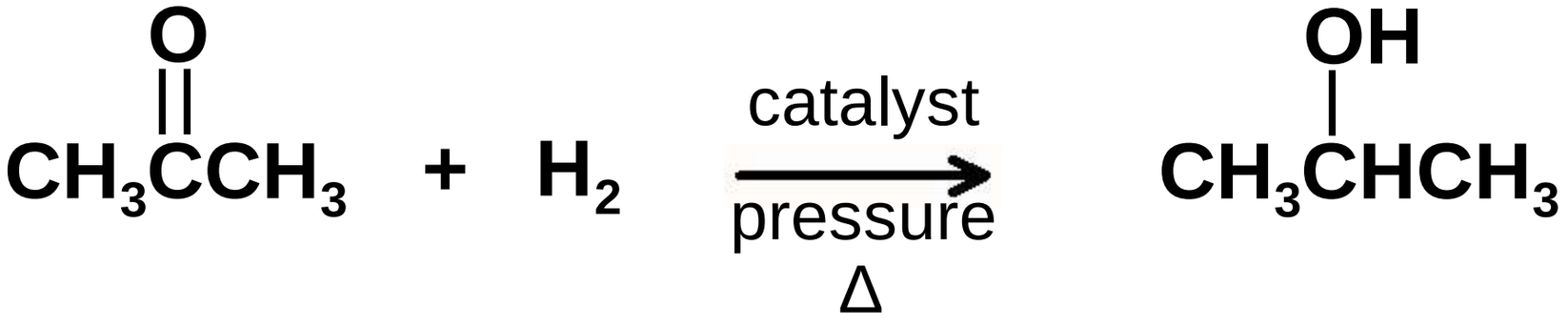
(1°alcohol) (aldehyde)

2. Controlled oxidation of a secondary alcohol produces a ketone.



(2°alcohol) (ketone)

3. Hydrogenation (addition reaction) of an aldehyde or ketone produces an alcohol.



(ketone)

(2°alcohol)