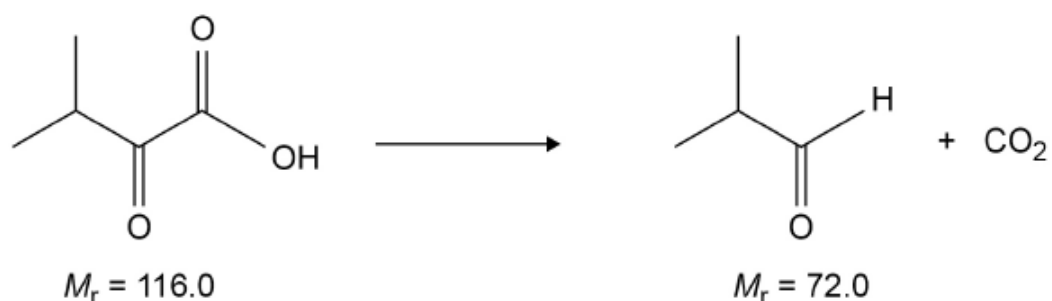
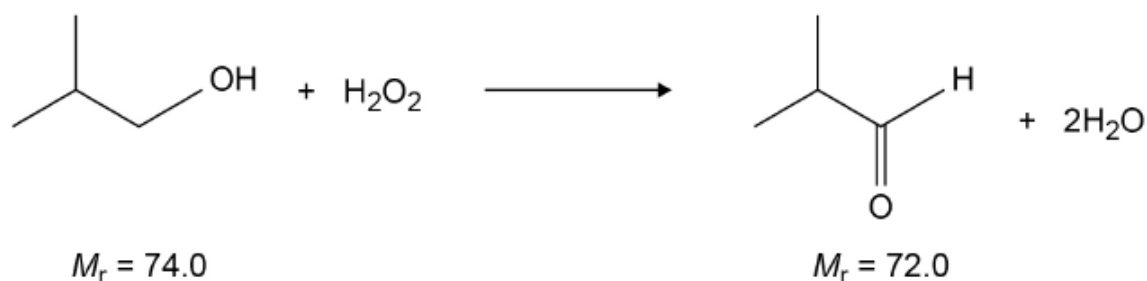


AQA – Organic analysis – AS Chemistry P2**1. No.3**

A student investigates two experimental methods of making methylpropanal. The equations for these two methods are shown.

Method 1**Method 2**

In each method, the student uses 1.00 g of organic starting material.

The yield of methylpropanal obtained using each method and other data are included in **Table 3**.

Table 3

	Method 1	Method 2
Yield of methylpropanal / mg	552	778
Percentage yield		80.0%
Percentage atom economy	62.1%	

Calculate the percentage yield for Method 1.

Calculate the percentage atom economy for Method 2.

State the importance of percentage yield and percentage atom economy when choosing the method used to make a compound.

[6 marks]

% yield _____

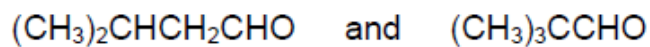
Importance of percentage yield _____

% atom economy _____

Importance of percentage atom economy _____

2. No.13

Which can be used to distinguish between these two compounds?



[1 mark]

A Acidified potassium dichromate(VI)

☐

B Fingerprint region of infrared spectrum

☐C M_r value in high resolution mass spectrometry☐

D Tollens' reagent

☐