Respiration – 2022 June IGCSE 0610

1. June/2022/Paper_ 12/No.23

What is the word equation for anaerobic respiration in yeast?

A glucose → alcohol

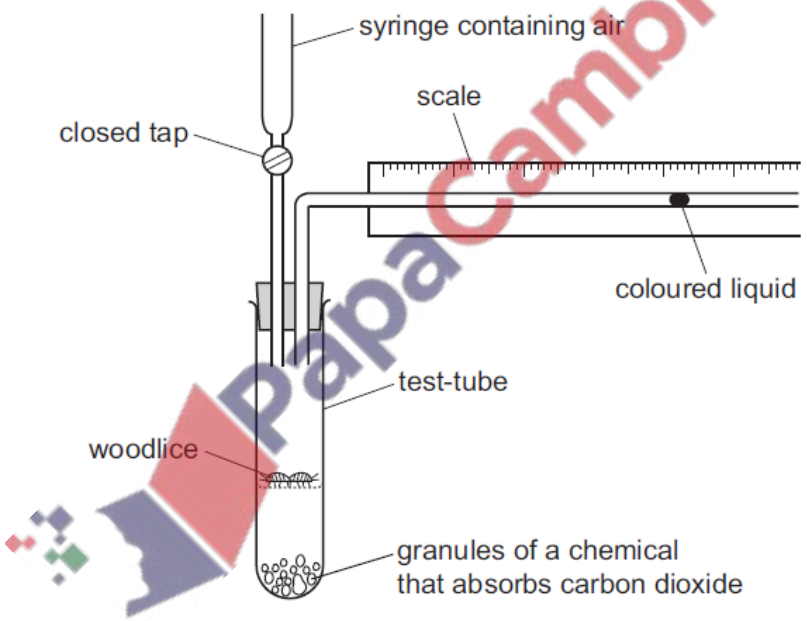
B glucose → alcohol + carbon dioxide

C glucose → lactic acid

D glucose → lactic acid + carbon dioxide

2. June/2022/Paper_ 12/No.24

A student used this apparatus to investigate the rate of aerobic respiration in woodlice.



Which statement describes and explains the movement of the coloured liquid when the woodlice are respiring?

A The coloured liquid moves towards the test-tube because the woodlice are using carbon dioxide.

B The coloured liquid moves towards the test-tube because the woodlice are using oxygen.

C The coloured liquid moves away from the test-tube because the woodlice are using carbon dioxide.

D The coloured liquid moves away from the test-tube because the woodlice are using oxygen.

3. June/2022/Paper_ 13/No.23

Which substances are used in aerobic respiration?

	glucose	oxygen	water
A	✗	✓	✓
B	✓	✓	✗
C	✓	✗	✓
D	✗	✓	✓

key

✓ = yes

✗ = no

4. June/2022/Paper_ 21/No.22

What is the balanced chemical equation for anaerobic respiration in yeast?

A $C_6H_{12}O_6 \rightarrow 2CO_2 + 6H_2O$

B $C_6H_{12}O_6 \rightarrow 6CO_2 + 6H_2O$

C $C_6H_{12}O_6 \rightarrow 2C_2H_5OH + 2CO_2$

D $C_6H_{12}O_6 \rightarrow 2C_2H_5OH + 2H_2O$

5. June/2022/Paper_ 23/No.21

Carbon dioxide is produced by aerobic respiration.

How many molecules of carbon dioxide are produced from the aerobic respiration of three molecules of glucose?

A 3 **B** 6 **C** 12 **D** 18

6. June/2022/Paper_ 31/No.7(a)

(a) A scientist measured the mass of carbon dioxide produced by anaerobic respiration in yeast cells for 1200 minutes.

Fig. 7.1 shows the results.

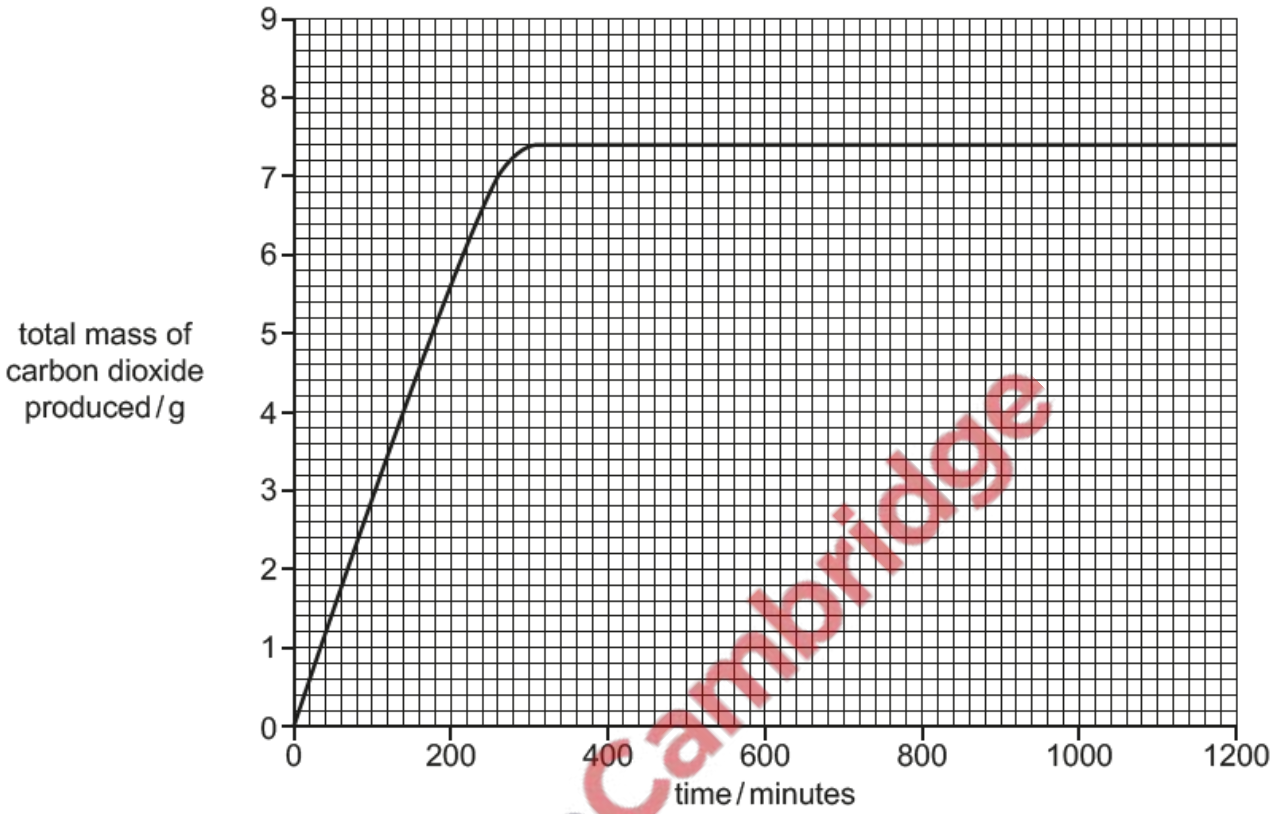


Fig. 7.1

(i) Complete the sentences to describe the results shown in Fig. 7.1.

The yeast cells produced a total of ..... g of carbon dioxide during 1200 minutes.

The yeast cells stopped producing carbon dioxide at ..... minutes.

[2]

(ii) The investigation was repeated with boiled yeast cells.

Predict the effect on the mass of carbon dioxide produced **and** explain your prediction.

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..... [2]

(iii) State the name of **one other** product of anaerobic respiration in yeast cells.

..... [1]