

8.2 Cell Respiration

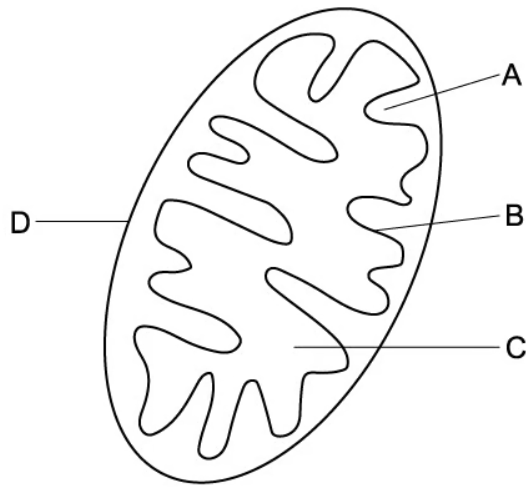
Question Paper

Course	DP IB Biology
Section	8. Metabolism, Cell Respiration & Photosynthesis (HL Only)
Topic	8.2 Cell Respiration
Difficulty	Easy

Time allowed: 10
Score: /5
Percentage: /100

Question 1

The diagram below shows a mitochondrion.

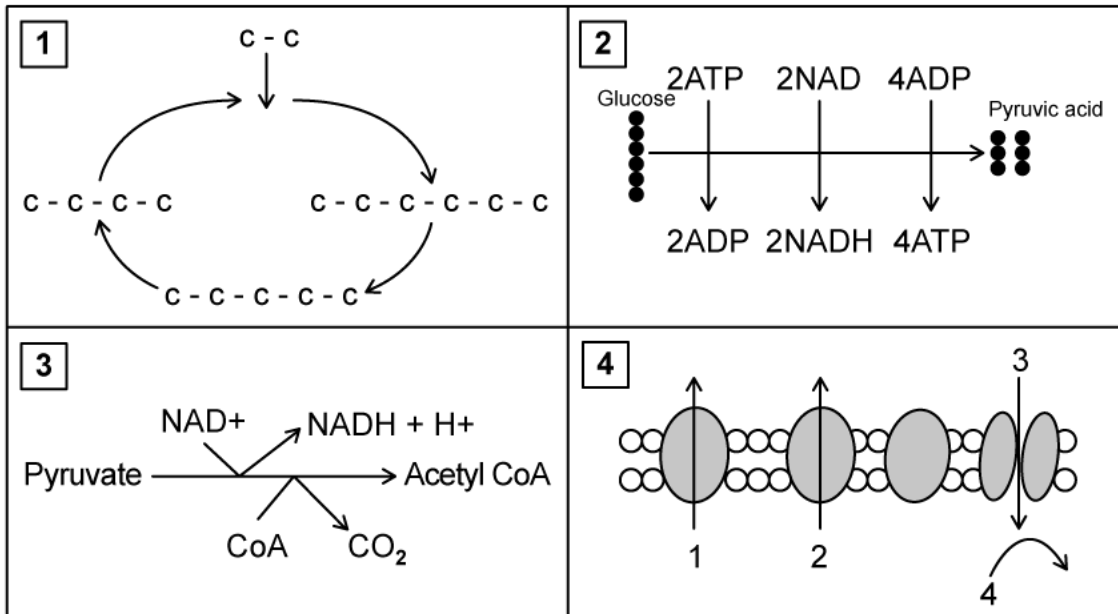


Which letter represents the mitochondrial matrix?

[1 mark]

Question 2

The diagram shows the four stages of respiration.



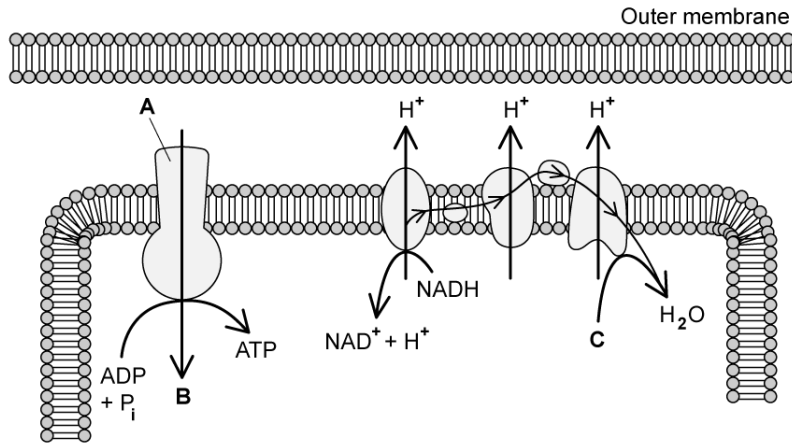
Which row correctly identifies the stages represented in the diagram?

	1	2	3	4
A	Glycolysis	The link reaction	The Krebs cycle	The electron transport chain
B	The Krebs cycle	Glycolysis	The link reaction	The electron transport chain
C	The Krebs cycle	The link reaction	Glycolysis	The electron transport chain
D	The Krebs cycle	The electron transport chain	The link reaction	Glycolysis

[1 mark]

Question 3

The image shows one of the processes of respiration.



Identify the molecule labelled A.

- A. A co-transport protein
- B. A phospholipid
- C. ATP synthase
- D. DNA polymerase

[1 mark]

Question 4

Which process is not part of glycolysis?

- A. Pyruvate is oxidised and decarboxylated
- B. Triose phosphate is oxidised to glycerate-3-phosphate
- C. Fructose biphosphate is split to form two molecules of triose phosphate
- D. NAD is reduced to form NADH + H⁺

[1 mark]

Question 5

In 1961 Peter Mitchell proposed a theory which resulted in a paradigm shift in the field of bioenergetics.

Which theory did he develop?

- A. The function of REDOX reactions in the electron transport chain
- B. The function of oxygen as the final electron acceptor
- C. The function of chemiosmosis in synthesis of ATP
- D. The importance of the link reaction in progressing from anaerobic to aerobic respiration

[1 mark]