



Edexcel GCSE Biology



Your notes

Gas Exchange

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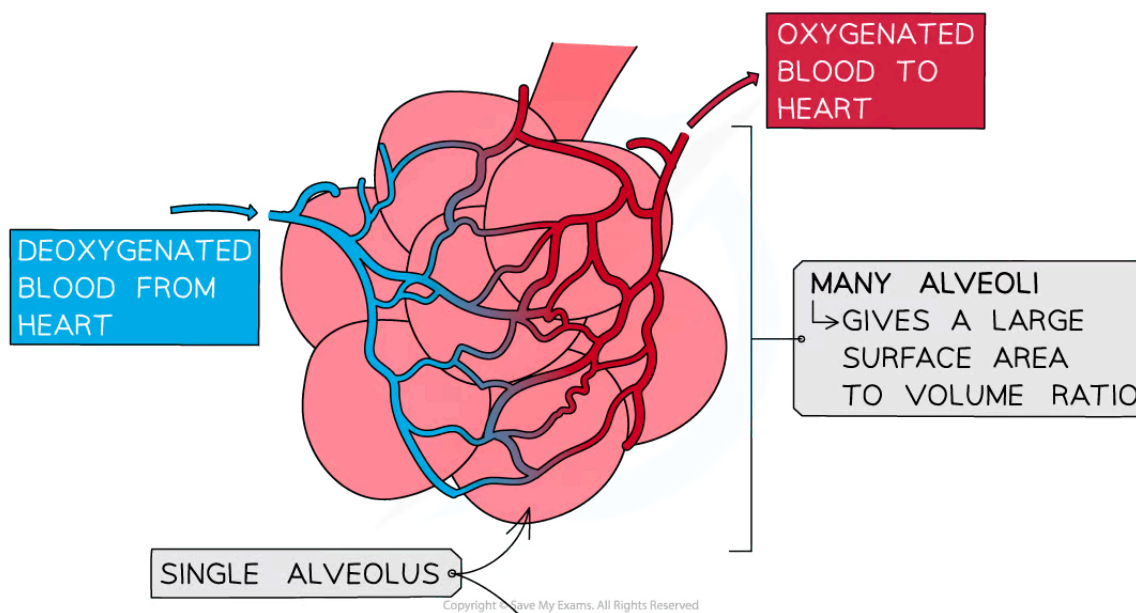


Your notes

Adaptations of the Alveoli

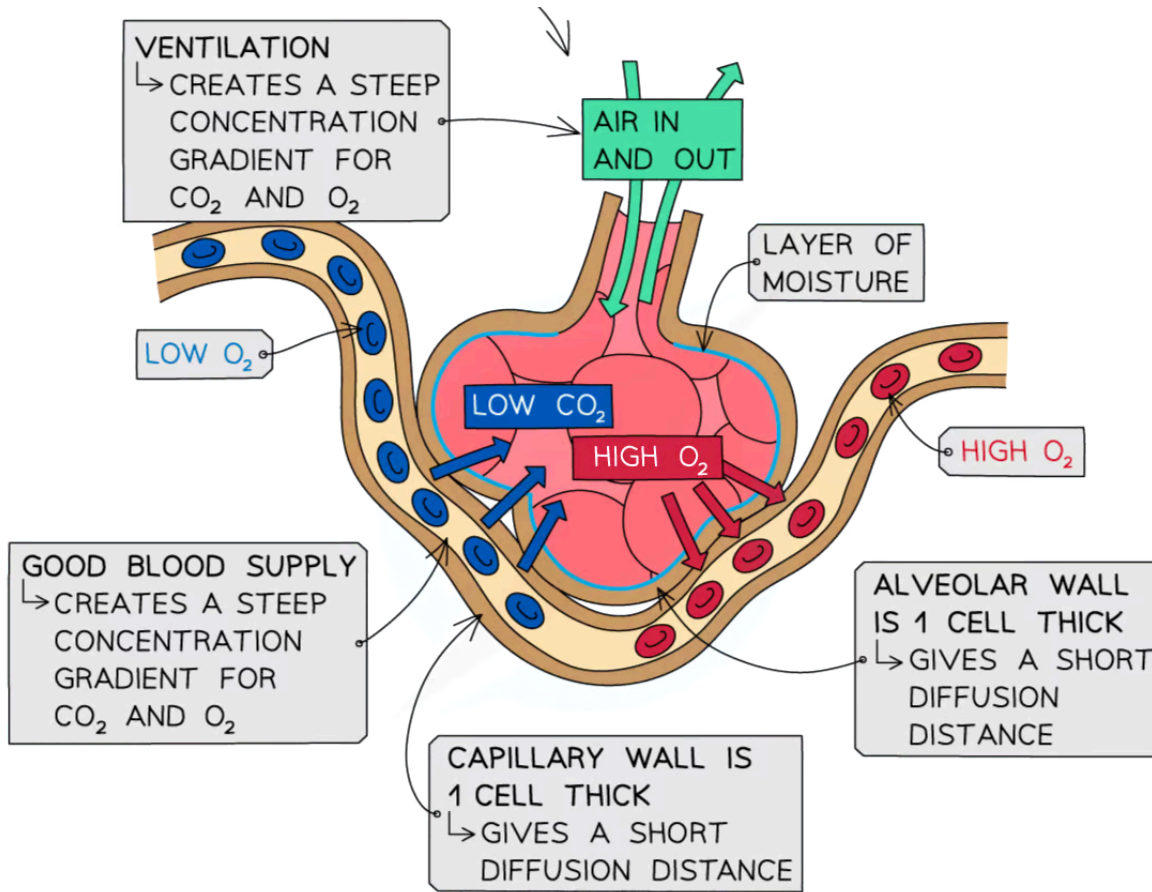
Adaptations of the Alveoli

- The **lungs** are the **gas exchange surface** in humans and so are adapted to maximise the exchange of gas by **diffusion**
- Inside the lungs there are many rounded alveolar sacs which give a very **large surface area to volume ratio**
- These **alveoli** are highly specialised structures
 - They (and the capillaries around them) have **thin, single layers of cells to minimise diffusion distance**
 - Ventilation maintains high levels of **oxygen** and low levels of **carbon dioxide** in the alveolar air space
 - A **good blood supply** ensures constant supply of blood high in **carbon dioxide** and low in **oxygen**
 - A **layer of moisture** on the surface of the alveoli helps diffusion as gases dissolve





Your notes



Alveoli are specifically adapted to maximise gas exchange