

# 8C Breathing and Respiration- Revision Worksheet

State what the word equation for aerobic **respiration** is.

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Label the **reactants** and the **products**.

Describe the early experiments that **Boyle** and **Mayow** carried out.

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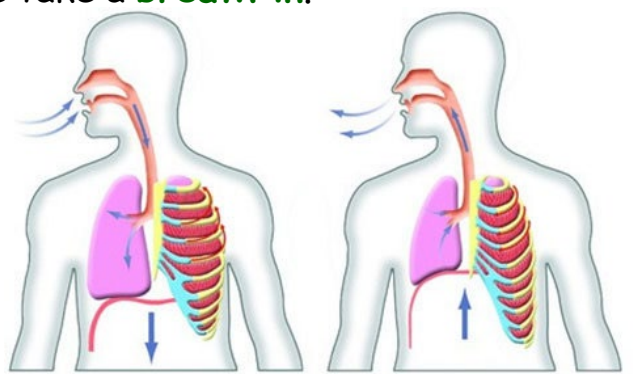
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Define the term '**ventilation**'.

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Using the diagrams below, describe what happens when we take a **breath in**.



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Describe how the **gas exchange system** is well adapted to keep the **lungs** clean.

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Draw and label a diagram of **ciliated epithelial cells**.

Describe how **gas exchange** happens in our **lungs**.

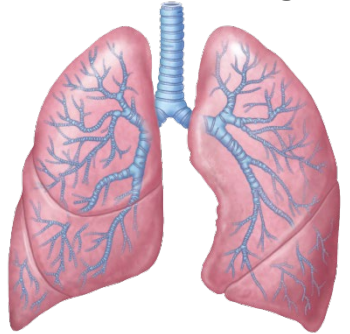
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Label the **trachea**, **bronchi** and where the **alveoli** are on the diagram below:



Describe how the **lungs** are well adapted for **gas exchange**.

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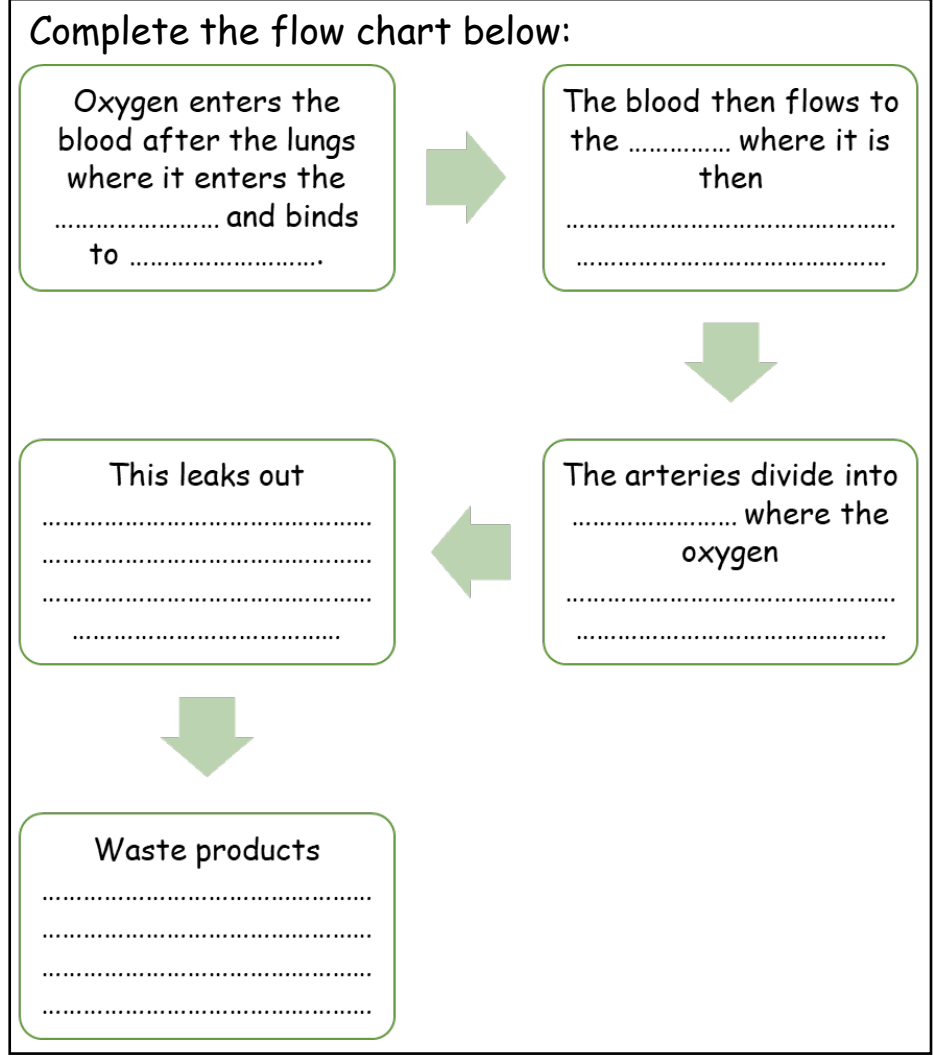
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State what makes up **blood**.

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Explain why your **breathing** and **heartrate** increases when you **exercise**.

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Describe what would happen to your cells without enough **oxygen**.

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Describe what can cause a **heart attack**.

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Explain the effect of the following substances on the body.

Carbon Monoxide	
Tar	

Describe three ways of detecting **respiration** / the presence of **CO<sub>2</sub>**.

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State the word equation for **anaerobic respiration**.

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Compare **aerobic respiration** and **anaerobic respiration**.

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Explain the purpose of **rebreather** apparatus for divers.

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Describe how some organisms use **gills** to take in **oxygen**.

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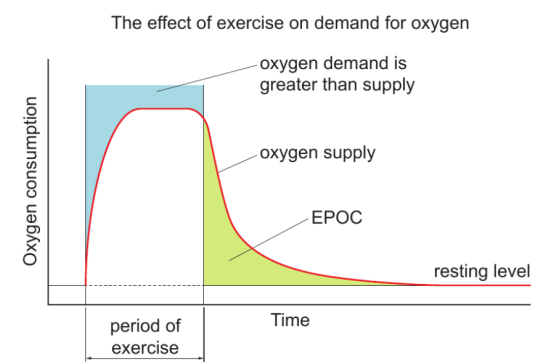
Describe how **gas exchange** occurs in **plants**.

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What happens to **oxygen** during **strenuous exercise**.

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Explain, using the graph below, what **EPOC** is.



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Rate the following on how well you think you can do them:



I can...

- Recall what happens in aerobic respiration.
- Recall the functions of organs in the gas exchange system.
- Explain how the structure of the lungs allows efficient gas exchange.
- Recall why means and ranges are used.
- Calculate means and ranges.
- Describe the effects of exercise on breathing and heartbeat rates.
- Describe how substances reach respiring cells from the blood and how waste products are returned to the blood.
- Describe the causes, and explain the effects of, reduced oxygen supply on the body.
- Identify and explain the difference between fact and opinion.
- Use sentences that show cause and effect.
- Recall how to detect aerobic respiration.
- Describe how gas exchange occurs in different organisms.
- Recall what happens in anaerobic respiration.
- Describe the effects of anaerobic respiration during and after hard exercise.