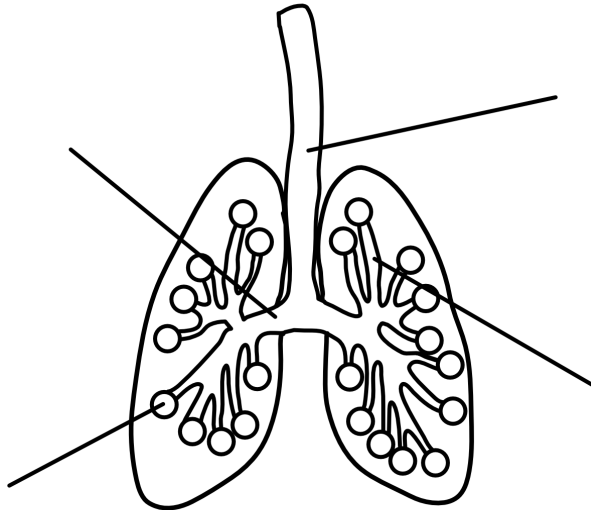




# Gas Exchange and the Lungs

1 Label the structures of the lungs indicated by the arrows in the simplified diagram below.



[ 4 marks ]

2 Name the two gases that we exchange via the lungs and state how they travel around the body

- 1) .....
- 2) .....

[ 4 marks ]

3 Why do we need a specialised exchange system to exchange the gases mentioned in Question 2?

- .....
- .....

[ 2 marks ]

4 State and explain 3 ways in which the alveoli are adapted to their role of gas exchange

- 1) .....
- .....
- 2) .....
- .....
- 3) .....
- .....

[ 6 marks ]

- 5 A sprinter runs a 400m race. She takes 42 breaths in the three and a half minutes before the race and 33 breaths in the 90 seconds after the race. What was her breathing rate before and after the race?

Breathing rate before the race = ..... m / min

Breathing rate after the race = ..... m /min

*[ 4 marks ]*

*[ Total 20 marks ]*